ANIMAL ISSUES

philosophical and ethical issues related to human/animal interactions

VOLUME 1 NO. 2 1997 SYDNEY AUSTRALIA

A N I M A L I S S U E S

The aim of this journal is to investigate philosophical and ethical issues related to human/animal interactions. Papers are invited on any topics within this general area.

Word length should be 4,000 - 10,000 words and papers should preferably be sent on a Mac disc or by e-mail to the editor, or if this is not possible, a hard copy should be sent to the editor. Style guide available on request.

Founding Editor: Dr. D. Russell, Department of General Philosophy,
University of Sydney, N.S.W. 2006, Australia
e-mail: Denise.Russell@philosophy.usyd.edu.au

SUBSCRIPTIONS (1997-8 rates):

Australia and New Zealand: A$12 per issue (postage included)
Other countries: A$20 per issue (postage included)

Please send payment with your name and address to:

Ms. S. O'Connor, Administrative Assistant,
Department of General Philosophy,
University of Sydney,
N.S.W. 2006, Australia.

A N I M A L I S S U E S

Vol. 1, No. 2

1997

CONTENTS

HYBRIDS, RIGHTS AND THEIR PROLIFERATION

Lynda Birke and Mike Michael

Introduction

Working out the concept of rights is a complicated business, which at least keeps philosophers occupied. Not so long ago, one of us would have been denied the right to vote, on the grounds of her gender. Yet now, at the turn of the millennium, she is far from sure that we have come very far on the question of women's rights. And if women, or minorities, or anyone else who is human can sometimes be denied rights, then how much more likely that non-humans will be?

Yet extending the concept of rights to non-human animals is increasingly being taken seriously. It is debated in academic journals, and forms the basis for a growing activism. The publication of books arguing in favour of extending rights to at least some animals has proliferated.[1] But the idea also has its critics. Some criticisms come from those who simply wish to keep nonhuman animals out of any moral or political agenda.[2]

The starting point of this article is the critique of the idea of rights, from the perspective of those who are animal advocates[3]; in particular, we start from the premise that the concept of 'rights' is too rooted in idealisation of the individual and autonomy. Such idealisation can be found in claims about nonhuman animals. But, we would argue, this marginalises any concept of relationality. In discussing relationality, we aim to address the ways in which relations between human and nonhuman animals are embedded in broader networks of inter-relations (that range from the evolutionary to the local and cultural). Those relations are also a product of the heterogeneous forms of communication between individual human and animal, especially in the case of companion animals.

We want, however, to do more than simply acknowledge relationality; we also want to suggest that it can serve as another basis for warranting, advocating, particular positive relationships with animals. That is to say, we aim to provide a narrative - contrasted to that of 'rights' - that prioritises our interrelations with animals in such a way that to harm 'them' would be to harm 'ourselves'. So, while we might be sympathetic to studies of the human-animal relationship, we would see these as assuming from the outset discrete humans and animals, whereas we are aiming to reach a position where we can 'assume at outset' the relationality of humans and animals.[4]

What we want to pursue here is the question of relationality. Other authors have noted the importance of relationships and contexts. Ted Benton for example, argues that the social context of both human and nonhuman cannot be ignored, while Freya Matthews insists that we recognise the commensality of humans and nonhumans.[5] We, Matthews points out, need animal company; but nature - animals- can benefit from our company, too. This is not to deny the existence of appalling abuses of animals, she argues, but rather acknowledges the mutuality of many human/animal interactions. Similarly Barbara Noske[6] argues that our society is partly based on its relation to, and exploitation of, animals. In this paper, we draw upon a quite different literature: we turn to recent work in the sociology of scientific knowledge as a starting point. In particular, we draw on the work of Bruno Latour, and his analyses of 'hybrids'.[7] We extend this idea to thinking about two examples of human relationship and communication with companion animals - with dogs, and with horses. These relationships, we argue, can be thought about as instances of hybrids, a concept that sees them as more than the sum of the parts. We argue that thinking in terms of hybrids of human/nonhuman can be useful in enabling us to move beyond some of the problems of individualism that beset debates about rights.

In doing so, we are not making claims for all nonhuman animals (although others might wish to extend the analysis further); indeed, we offer this paper very much as a preliminary exploration. Nor are we seeking to undermine the spirit of animal rights philosophy. On the contrary, we are committed to it, but do not find it enough.

Right is Wrong?

There have been a number of critics of the philosophy of animal rights - indeed, of the concept of rights more generally. Perhaps one of the strongest criticisms is that notions of rights rely on a profound separation and individuality, as well as prioritising rationality. Benton[8] notes, for instance, the basis of our understanding, and the idealisation of certain rights in the eighteenth century. He points out that while freedom from arrest, and freedom of association were specified, the rights of health, bodily integrity, nutrition, and so on, were not. This was, moreover, the period of history when our modern separation of nature from culture was consolidated; it was the sphere of the 'natural' that was omitted from these idealised rights - the needs of the body, and the nonhuman world.

Additionally, Benton reminds us of the ways that notions of rights tend to obscure 'the social-relational preconditions' for the emergence of the 'human individual' as bearer of rights, and with particular qualities, attributes and abilities 'in virtue of which they are held to have inherent value'.[9] 'Rights', resting as they do upon some version of individualism, neglect the many ways in which our experiences are situated.[10]

Another point needs to be made. The ideas concerning rights have 'acquired an exaggerated importance as part of the prestige of the public sphere and the masculine, and the emphasis on separation and autonomy, on reason and abstraction'.[11] Separation and autonomy are defined, against others - be they nonhuman animals, an ill-defined 'nature', or particular excluded groups of human others. It is through this process of exclusion against, that feminism becomes linked to environmental and animal causes: women, nature and nonhuman animals can, in different ways and at different times, become others to the story of separation.

Plumwood argues instead for a form of relationality, which, she reminds us, is not the same as the identification with nature sometimes implied in writing about deep ecology (too close an identification may blind us to understanding an other's suffering).[12] Nonhuman animals have their own societies, but they are also - deeply - in relationship with other animal kinds, including humans. In different ways, they are in relationship to

human societies (although there is a world of difference between the 'domestic animals', socialised into human societies, and the relationship of a wild species to humanity).

Relations with nonhumans: Introducing Hybrids

The word 'hybrid' has many meanings. It can denote a deliberately bred cross between, say, two plant species; it might conjure up 'hybrid vigour'. Or, it might carry meanings of illicit mixtures, or something defiled by being less pure.

The sense of 'hybrid' that we use here draws on the notion of hybrid introduced by Bruno Latour, in his work on technoscience. In a recent book, Bruno Latour describes what he considers to be two practices central to modernity. On the one hand, there is 'translation', which 'creates mixtures between entirely new types of beings, hybrids of nature and culture'.[13] On the other, there is also 'purification', the process by which we keep humans separated off from nonhumans. Modern Western culture tends towards the latter, even while busily creating new mixtures (sometimes literally, as in the case of genetically engineered organisms).

One problem with the animal rights position, following Latour, is that the concept of rights, while apparently denying separation from other animal kinds is firmly rooted in it. All it seems to do is to move the goalposts, to allow some kinds of animals onto the pitch. Life, meanwhile, is awfully crowded in the stands and onlookers are policed to stop them invading.

But it is precisely because of that history of purification that the practice of sociology or anthropology has ignored all else but human-human relationships.[14] Not surprisingly then, we are unused to thinking about all the nonhuman things that contribute to our world, forming chains of associations (that are both material and semiotic) with humans and other nonhumans. These are part of our social organisation, behind-the-scenes contributors - though of course 'social' becomes a misnomer in this context for what we see are 'orderings'[15] made up of heterogeneous elements. Expanding on this idea, Bruno Latour makes the point that

> We are never faced with objects or social relations, we are faced with chains which are associations of humans (H) and nonhumans (NH). No-one has ever seen a social relation by itself...nor a technical relation...Instead we are always faced with chains which look like this H-NH-H-NH-H-NH...[16]

The 'nonhuman' here may mean a technical artefact; thus, our communication with you, the reader, depends upon technological relationships, a complex array of computers, software, and international institutions. But, we want to argue, 'nonhuman' can also mean nonhuman animals.

Breaking the boundaries of what counts as human usually results in a rush to demonstrate the ways in which animals are not rational, are not self-aware, are not intelligent, and so on. Separating ourselves off from 'nature' characterises the modern period, Latour argues. But the study of society or culture has itself developed out of that separation, and it specifically excludes all nonhuman influence - be that inanimate or animate. Animals, plants, technical artefacts - all belong to the realm of the nonsocial; they can be left to be studied by people (scientists) who themselves deny the existence of the social in the descriptions they themselves make of the nonsocial. Yet isn't the existence of 'society' itself crossing the boundary, depending as it does on much more than merely human-human relationships?

Latour's work rests on actor-network theory. Put briefly, this seeks to map out complex networks of humans and nonhumans. The world of actor-network theory is partly ruled by the generalized 'principle of symmetry' that Bruno Latour and Michel Callon[17] have advocated. In essence, this principle rejects any *a priori* distinctions between the human and the nonhuman, agent and object, the social and the natural or the technological (such distinctions are all too often simply assumed, they point out). Thus, what is to count as 'human' or 'natural' or 'technological' is a matter of struggle between various actors such as scientists, policy makers, lay publics and the like. One relevant example of this would be current debates about the moral status of the great apes;

there is ongoing political struggle over whether they might be 'counted' as animals (part of nature) or at least partly be admitted to the realm of the human.[18]

It is, then, a matter of empirical investigation as to what has emerged as 'natural', 'artificial' or 'cultural'. More recently, Latour has elaborated this view[19] to argue that human and nonhumans alike are interfused with all manner of nonhumans and humans (the network). Such heterogeneity is characteristic of the modern condition (indeed, all conditions). Despite our best modernist efforts at denying the 'exchange of properties' between - that is, purifying - humans and nonhumans, this heterogeneous process of mingling continues apace. What makes this theory different from many others is its insistence that nonhuman - technological and 'natural' - are present in the production of every 'ordering' of relations. We are always comprising hybrids, temporary or less temporary associations with a vast array of nonhumans.

So, if we are to describe a person's relationship to her dog in these terms, then we must speak not only of the human-and-the-dog, but also of the other 'allies' that influence that relationship. Whatever other networks she engages in, Lynda is also 'enrolled' into certain networks by the dogs she lives with. This includes the dogleads and their manufacturers (see below), the producers of dog food, dog beds and canine distemper vaccine, veterinary surgeons - not to mention the resident cat. To put it in terms of hybrids: the hybrid 'Lynda-dog-lead-dog' is constituted through and depends upon these various networks. This, of course, is no different from the production of 'human individuals' who are an effect of those networks that poststructuralists have deconstructed. We shall return to the nature of these networks below.

Relationalities and Animals

There has recently been an upsurge in writing about the 'human-animal relationship'. New books and journals appear, marking this out as a new area of study. That focus is certainly welcome, and makes a refreshing change from the assumption that animals are completely separate from us. Yet, perusing the contents of those journals is sometimes

disappointing. What we find are examples of animals bringing benefits to humans, in hospitals, in our homes, to children, to disabled people. Some articles may tell us of how human contact can benefit animals (usually companion animals); but very few speak of the relationship between the two. In what follows, we will explore two examples in order to explicate this 'relationality'. But before we embark upon this, a little theoretical gloss is in order, if only to clarify what we are attempting to do as we switch registers from the local (personal) interactions between humans and animals to evolutionary relations.

What is a human? The production of humans relies on particular techniques, practices, discourses - what Rose[20] calls 'subjectifying technologies'. These include what Rose refers to as the psy disciplines (psychology, psychiatry, psychotherapy, psychoanalysis), though many other practices and technologies also shape 'the human'. The psy disciplines, for example, help to give coherence to the notion of a unitary individual, as well as contributing to the values and interests that are invested in such a figure.

What we are attempting here, albeit tentatively, is to do something similar for another character - the human-animal hybrid. So, rather than accept the ideas of individualism and rights, we can write a different story, that contributes to a concept of human-nonhuman hybridity. We could begin, for instance, by pointing to how this figure/character/actor is grounded in, and emerges out of, the evolutionary history of domestication, or to various pre- and pro-scriptions regarding how such human/nonhuman hybrids should behave.

If we thus begin by assuming human/animal relationality - or the existence of the hybrid - then we can speak in terms of the co-production and mutual emergence of humans and animals. To discriminate against the latter, becomes akin to discriminating against the former, for these, indeed, cannot be separated. With this overview in mind, let us proceed with storying our hybrid.

Speaking for - or otherworldly conversations?

Animal companions, or pets, have long been known to have therapeutic effects upon their owners. In particular, owners claim that 'their animals are sensitive to their (the owners') moods and feelings'.[21] The processes of communication that are evident here are clearly not linguistic, but vocal, visual and tactile. However, animals' lack of linguistic ability may be one of their prime assets in that animals cannot, as a consequence judge, betray or criticise - their feelings for the human are apparently uncontingent. But this intimacy does not preclude humans from 'speaking for' their animal companions. As Sanders notes:

> Because the animal is 'mute', caretakers often find themselves in situations in which they must 'speak for' their nonhuman companions. In so doing, they make use of a rich body of knowledge derived from an intimate understanding of the animal-other built up in the course of day-to-day interactional experience. Dog owners commonly give voice to what they perceive to be their animals' mental, emotional, and physical experiences.[22]

Such patterns of 'speaking for' suggests a process of retelling, by humans, of their own and animals' experiences with the aid of more or less familiar stories. But that does not mean we should not take them seriously.

Indeed, we would argue that there is a serious problem with a sociology which persistently ignores animal others, for it remains rooted in the persistent dualism of nature and culture. Many animal 'others' are deeply integral to human societies - indeed, as Benton argues[23], they are partly constitutive of our society in many ways. But understanding this does not mean that we have to objectify them, or even to accord them human status (as seems to be implied in some formulations of rights). Feminist historian of science Donna Haraway, reflecting on these issues, suggests that:

> The last thing 'they' (animals) need is human subject status, in whatever cultural-historical form... We need other terms of conversations with animals, a much less respectable undertaking. The point is not new representations, but new practices, other forms of life

> rejoining humans and nothumans.[24]

Out of this emerges, Haraway hopes, a new form of human being:

> Once the world of subjects and objects is put into question, that paradox concerns the congeries, or curious confederacy, that is the self, as well as selves' relations with others. A promising form of life, conversation defies the autonomization of the self, as well as the objectification of the other.[24]

So, what happens as we engage in those non-linguistic conversations with animal others is a diffusion of the (human) self. The human identity that emerges from these conversations is no longer linear, but is realised through all forms of communication. We want to emphasise that that process must include nonverbal communications, with nonhuman actors.[25]

We might say that animals are mute only if we remain deaf. As Kath Smart has shown[26], dogbreeders believe themselves to be in conversation with their animals, and sometimes even under scrutiny or surveillance - a perception familiar to anyone who works closely with animals in similar ways. That perception implies an agency, that the dogs are somehow enrolling the humans into the association. The idea that there is co-agency between (some) nonhuman animals and humans is not, of course, new to animal trainers and breeders. But it is not part of the descriptions of the world to be found in academic disciplines; there, the purification of human culture - to which Latour refers - is endemic. Humans have their own society; animals belong to the other side of a heavily policed boundary (within the natural sciences).

But the boundaries tend to break down, as Latour emphasised (see note 7). For example, in contrast to the familiar story that humans 'domesticated' dogs in prehistory, Budiansky[27] contends that animals such as dogs 'chose' us. They were, he suggests, drawn to human communities, to the shelter, food and protection they might offer. In that case, the domestication of dogs 'is an evolutionary phenomenon rather than a human invention'. Dogs, we might say, have a long history of

enrolling humans, just as we have one with them. Both have adapted to each other, and both are (sometimes) in deeply mutual communication. Here, we have a story that crosses the boundary of 'natural science' (evolution, animals) and 'sociology' (human society).

One way in which human-dog communication is manifest occurs when we observe a person 'taking her dog for a walk'. Usually, this involves a technological artefact - the doglead. This object, however, mediates exchanges between the human and dog, and blurs the site of agency. Who is the user - human or dog? Who does the configuring - animal, lead, or human? For example, dogs may have their own agendas; sometimes, these fit with human agendas - sometimes, they do not, as is often the case with Lynda and her three dogs-plus-dogleads. Agency, in that case, is a complicated business.

Dogs, indeed, may resist human desires (witness the reluctance to enter the veterinary surgery, or the desire to jump off the table once there). But even when they cooperate, agency is evident. In other words, dogs may be committed to a certain 'contract' and will bring their 'handlers' into line. But also, the fulfilment and maintenance of the contract is continuously performed through communication, at many levels, between human and dog.

This process of negotiation is partly conducted through the medium of the doglead - especially so in urban areas,[28] where it is the hybrid of human-doglead-dog who must negotiate the tricky terrain. The doglead then permits a mutuality - both human and dog look out for objects or events on the other's behalf. In some cases, the dog's agency is more prominent, as is the case with guide dogs. Stories abound among those working with 'service animals' of the animal acting heroically (leaping under the wheels of a sliding wheelchair, for instance) - agency, indeed.

We turn now to another example - that of human/horse interactions. Again, the popular image is one of humans using and dominating horses (as exemplified in the rather misleading phrase, to break a horse). Partly for that reason, there are some in the animal rights movement who

consider that it is morally wrong to ride horses. But this position again plays down any mutuality.

Here, the 'hybrid' we might describe consists of human-bridle-horse. Communication between the two living entities takes place partly through the medium of the bridle or halter, and partly kinaesthetically - through movement and its sensing. As with dogs, there is a continuous subtle play of conversation: for horses are large animals and cannot be dominated (even very small ones, like Shetland ponies, can beat puny human strength). They will, however, agree to converse.

Now it is also true that there are many, many instances of abuse by humans - a breaking of the contract, as it were. Such acts may, in part, reflect a belief in domination. But to what extent can humans truly dominate an animal, especially if it is the size of many horses? On the contrary, 'learning to ride' means not only acquiring certain physical skills, but also learning a new, largely tactile, language. Through that means, we can communicate with the horse. But the horse also has agency; it can - easily - refuse to work with us. Certainly, if a horse does not want to go over a jump, it will not - just as it will show agency by resistance if, say, a human mishandles the intervening technology (by grabbing at the reins and hurting the horse's mouth).

There are certainly some among animal rights activists who believe that it is morally wrong to 'make' horses jump obstacles - especially in contexts where there is a risk of injury. There have, as a result, been demonstrations at several international equestrian events. Whatever the merits of their claim, it is somewhat ironic that demonstrations focus on the 'showpiece' events, for it is there that the 'hybrids' are policed most strongly. The literature of the 'horse world' relies on a rhetoric of welfare, in which the horse's needs are paramount.[29] Human-bridle-horse hybrids must follow particular rules, at least in public arenas. To an extent, the horse takes part in this rule-following.

Domestic animals, such as dogs and horses, are socialised into a society. By that we mean not only their own society (the local community of dogs at the breeders, or the horses at the stud), but also into human society.

What we should perhaps be insisting on, indeed, is a notion of a hybrid society, consisting of humans along with nonhumans. Just like a human infant, a young animal must be socialised into that hybrid society: both kinds of infants must 'learn the rules' about other members of society.

Part of the prevailing view that nonhuman animals are domesticated by us is the claim that, underneath the veneer of domestication, there is a 'wild' animal, driven by archaic instincts. This additive view, of the thin veneer of culture overlaying baser wildness, fails to address the social embeddedness of domestic animals. Yet we project our social expectations onto domestic animals, and sometimes they behave accordingly. For example, within the world of 'horse people' (a curiously hybrid phrase, to be sure!), there are many humans who will avoid mares, in the belief that they are less 'trainable'; stallions, too, are often thought to be 'difficult'. Yet - if true - how much of that is due to human expectations and to socialisation? If humans socialise the animal into a role of being 'difficult' (that is, less susceptible to mutual communication), then that is what it will become. So, too, may human children.

Returning to the theme of animal rights, we have argued that one important problem with rights is its emphasis on individuality, rather than relationality. This in turn is deeply entwined with the historically contingent separation of 'nature' from 'culture' in the West. That separation then excludes the place of (at least some) animals in society and culture, and their interests in maintaining that place.

The problems of the ways that animals may be treated today by humans arise in large part from their relegation to the (inferior) world of nature. That is not to say that prior to the modern period, animals were treated well; they were not. But a characteristic of modernity is the deep anxiety to police the boundaries of human culture (or even of Western culture); as Latour puts it (note 7), we are obsessed with purification. One manifestation of this is our constant need in the West to return nonhuman animals to their 'place' in nature. Because of this, we tend to have difficulties with those nonhuman animals whose place is by our sides; are they in nature, or do they belong to culture?

Yet the very same culture so preoccupied with purifying its boundaries also works to transgress them. Science, for example, does both. The practice of science assumes a separation from nature (hence the supposed objective stance, by which scientists claim to 'know' nature, while denying their own cultural contingencies); but simultaneously, it denies separation (evolutionary theory and genetics) and even creates boundary-crossing organisms (hybrids and chimeras abound in the new age of biotechnology).

Concluding Remarks

Our use of the idea of hybrids is deliberate. We are not necessarily advocating a literal interbreeding of people and other animals (which is another debate). Rather, we want to use the concept of hybridity for two related reasons. The first is that the notion of a hybrid implies boundary-crossing and mixing - if not literally, then certainly at a conceptual level. This confounds issues of what is human? or what is animal? or even what is an individual? At the very least, that confounding should help to destabilise that tired old division between nature and culture.

Hybrids also open up a space, secondly, to think about relationality. Now we have used the term hybrid to emphasise the conjoint nature of the hybrid, and its co-agency. As critics of the nature/culture or nature/nurture dualisms have often bewailed, it is all too easy to invoke some kind of addition (nurture adds onto the nature base), or a simple interaction (A can affect B, which can affect A[30]). But even this can still be split apart - indeed, that splitting is often required by the very methods by which we might study something. So, we might choose to study 'the human/dog relationship' as a function of doggy effects on humans (such as reduction of heart rate if you go patting a dog), or perhaps of human effects on dogs (selective breeding, say).

Yet what is missing from, or played down by, this kind of account is the mutuality; both human and dog become changed, and become more than simple person-plus-dog. By trying to think about this chimerical being as a hybrid, we want to emphasise that 'more than'. Lynda is a part of many

human networks, but also at times comes together with dogs and horses to create temporary hybrids: these, in turn, generate other networks of humans and nonhumans.

One extreme position we have encountered among animal rights activists is the idea that it is wrong to 'keep pets', that the animals should be free to wander and to 'be themselves', that they have intrinsic rights to freedom. But in this specific case - companion animals - such a stance would deny their relationships with humans. It is also based on a highly idealised notion of 'freedom', for who among us humans has such freedom? Aren't we all constrained by, among other things, our relationships with other beings? Invoking individual 'rights' seems to gloss over those constraints, and to ignore the very relationality on which we (and many nonhuman animals) base our social lives.

Now in seeking to emphasise that relationality, we recognise its limitations when it comes to other human uses of animals. We want here to use the idea with regard to companion animals. When it comes to intensive farming, the rhetoric of rights is probably more politically useful; even the more liberal welfare lobby talk about ensuring that certain animal needs are met.

The use of animals in scientific experimentation is another area where to insist on at least some rights may be a useful political strategy. Thus, those involved in reform or working for welfare might argue that laboratory animals have a right to a certain amount of space in their living quarters. Even so, we should remember that the practice of using animals itself seems to require that scientists' separate themselves off from the animals, that they psychologically and culturally deny any relationality. Indeed, on those occasions where laboratory animals become individually incorporated into relationships with people (as 'lab pets', say), then they usually are 'saved' from the experiments.[31]

Much modern theorising about evolution seems to stress individuality (or even to shift it onto selfish genes). Thus, despite the appeal of Darwin's ideas to those of us who see kindred spirits in the nonhuman world, we inherit a cultural tendency towards atomism. Yet there are also

evolutionary theorists who do not see such atomism in the natural world, who emphasise instead the co-evolution of ecologically interrelated species.[32] Rather than seeing individual species or populations as rather passively adapted to a (largely inert) environment, this reformulation insists on mapping out the networks of interrelationships and effects. Indeed, an animal's or a species' environment is constituted by other organisms, including humans - hybrids aplenty.

And there, to return to Val Plumwood's analysis of ideas of nature, lies the difficulty at the heart of rights theory. For while we might speak of the 'rights' of animal A to roam free 'around its environment', that is to ignore the 'rights' of other organisms. To take the oft-used example, whose rights should we then heed, the sheep or the wolf?

We have borrowed here from the concepts of hybridity and actor-networks, developed in the literature on sociology of scientific knowledge. Their relevance to a discussion of our relationship to animals is twofold - they explicitly problematise the separation of nature from culture, and they relocate humans individuals back into networks of other actors including nonhumans. Whether we speak of events over evolutionary time, or seek to describe human relationships with (certain) animals now, any rhetoric of individualism is limited.

Instead, we must try to develop a relational framework, and to develop an ethical stance from that. It is not necessarily in the best interests of companion animals (at least) to talk of their individual 'rights to roam free' (where?). Nor is it necessarily to deny them some intrinsic freedom to follow their instincts - a belief which maintains the notion that nonhuman animals are 'in nature' in ways that we are not.

Once we think in terms of hybrids between culturally specific humans, nonhuman nature, and even technical artefacts (this, it should be noted, could include ecosystems), then perhaps we can develop a language of interests that apply to the hybrid. Among other things, hybrids are conjoint entities: they are not simply one entity sitting alongside another. As a consequence, hurting one part of a hybrid hurts the rest.[33] Perhaps this move will not always work to protect the interest of either humans or

nonhumans.[34] But, we want to insist, seeing individuals as bearers of atomistic rights does not work well either, not least because it ignores our collective social networks.

We need, to return to Donna Haraway's insights, to develop new forms of conversation with nonhuman others, to explore and celebrate our joint kinship.[35] In so doing, our highly overdeveloped sense of selfhood might begin to diminish; we might even allow a breaching of our boundaries. Lest that sound too anthropocentric, nonhuman animals stand to benefit; for their relationships with less egocentric and territorial humans are likely to be more welcoming and communicative. To speak of their 'rights' seems only to reinforce our own selves and boundaries. Surely they - and we - deserve better than that?

Acknowledgements

Tam, Lisa and Penny very kindly came to an agreement not to interfere too much in the hybrid creation of various drafts of this on Lynda's computer. This was, however, totally dependent upon frequent cuddles and a promise concerning dog-leads.

Notes

1. For example, T. Regan, *The Case for Animal Rights* (Routledge, London, 1983) and B. Rollin, *Animal Rights and Human Morality* (Prometheus Books, Buffalo, 1992).
2. For example, M.P.T. Leahy *Animal Liberation: Putting Animals into Perspective* (Routledge, London, 1991).
3. Which is how we would describe ourselves. This is a position which is sympathetic to the principles of animal rights, while at the same time being critical of some of the assumptions underpinning the concept of rights in general.
4. The term 'animal' covers a huge number of species, of many different kinds. Our focus here is on what are sometimes called 'companion animals', who can enter into relationships with us. For most people, that means certain mammals (such as dogs or cats), and some birds (such as budgerigars). Occasionally, people might claim relationships with other species, such as some reptiles. Rather than repeat this point whenever the word 'animal' appears, we ask that it is taken to mean a specific, restricted, sense of 'animal'.
5. T. Benton, *Natural Relations* (Verso, London, 1993); F. Mathews, 'Living with Animals', *Animal Issues* 1 (1), 1997, pp.4-20.
6. B. Noske, *Humans and Other Animals* (Pluto Press, London, 1989).

7. B. Latour, *We have never been Modern* (Harvester Wheatsheaf, Hemel Hempstead, 1993).
8. See n.5 above.
9. Ibid., p.172.
10. 'The individual', indeed is a construct that postmodernists of many colours have laboured hard to deconstruct. We do not, however, argue for such wholesale deconstruction; indeed the very concept of rights does itself have heuristic and political value.
11. V. Plumwood, 'Nature, Self and Gender: feminism, environmental philosophy and the critique of rationalism', *Hypatia* 6 (1991), p.8.
12. Ibid.
13. See n. 7 above, quotation from p.10.
14. See n. 6.
15. J. Law, *Organizing Modernity* (Blackwell, Oxford, 1994).
16. B. Latour, 'Technology is Society Made Durable' in J. Law ed., *A Sociology of Monsters* (Routledge, London, 1991), p.110.
17. See M. Callon, 'Some elements in a sociology of translation: domestication of the scallops and fishermen at St Brieuc Bay' in J.Law ed., *Power, Action and Belief* (Routledge, London, 1986); M. Callon, 'The sociology of an actor-network: the case of the electric vehicle', in M. Callon, J. Law and A. Rip, eds, *Mapping the dynamics of science and technology* (MacMillan, London, 1986) and B. Latour, *Science in action: how to follow engineers in society* (Open University Press, Milton Keynes, 1987).
18. See P. Cavelieri and W. Kymlicka, 'Expanding the social contract', *Etica & Animali* (Special Issue on the Great Ape Project) 8 (1996), pp.5-33.
19. B. Latour, 'On technical mediation' *The Messenger lectures on the Evolution of Civilization. Working Papers Series* (Institute of Economic Research, Cornell University, 1993) and B. Latour, 'Pragmatogonies: A Mythical Account of How Humans and Nonhumans Swap Properties', *American Behavioral Scientist* 37, (1994), pp.791-808.
20. N. Rose, *Inventing Our Selves: Psychology, Power and Personhood* (Cambridge University Press, Cambridge, 1996).
21. J. Serpell, *In the company of animals* (Blackwell, Oxford, 1986). Also see C.R. Sanders, 'Perceptions of Intersubjectivity and the Process of 'Speaking-For' in Canine-Human Relationships', Paper presented at the International Conference on *Science and the Human-Animal Relationship*, Amsterdam, The Netherlands, March 5-6, 1992.
22. Ibid., pp.6-7.
23. See note 5.
24. D. Haraway, 'Other Worldly Conversations: Terran Topics; Local Terms, *Science as Culture* 3 (1992), pp.86-7.
25. M. Michael, *Constructing Identities*. (Sage, London, 1996).
26. K.R. Smart, 'Resourcing ambivalence: Dogbreeders, animals and the social studies of science'. (1993) Unpublished Ph.D. Manuscript, Lancaster University.
27. S. Budiansky, *The covenant of the wild* (Weidenfeld and Nicholson, London, 1994).
28. In Britain, there are several strands to the legislation that covers the dog (e.g. dogbreeding; rabies; dog abandonment). When it comes to the use of the dog-lead (or

the muzzle), this is covered under a number of Acts. Under the Dog Act 1906, Animal Health Act 1981 and the Environmental Protection Act 1990, there is provision for government officers to seize dogs believed to be stray - this sets up a general context in which dogs should be kept under control. More specific provision is present in the Road Traffic Act 1988. Thus, section 27 (Control of dogs on roads) (1) states: 'A person who causes or permits a dog to be on a designated road without the dog being held on a lead is guilty of an offence'. After the Devil Dog scares of the late 1980s, there was an extension of Crown Court powers, as laid out in the Dogs Act 1871, in relation to the destruction of dangerous dogs and the punishment of owners in the Dangerous Dogs Act 1989. This Act was clarified in the Dangerous Dogs Act 1991 in which, over and above prohibitions regarding the ownership of 'fighting' breeds and other specially dangerous dogs, there were provisions made for ensuring that dogs are kept under proper control. Thus, section 3 (1) states: 'if a dog is dangerously out of control in a public place - the owner, and (b) if different, the person for the time being in charge of the dog, is guilty of an offence, or, if the dog while so out of control injures any person, [this constitutes] an aggravated offence, under this subsection'. The point is that such legal conditions are part and parcel of the network in which the human-dog hybrid is embedded, and out of which it emerges.

29. It is, moreover, a welfare rhetoric that allows magazines such as the British *Horse and Hound* to defend the hunting of wildlife by hounds. If foxes (or stags, or minks) were not controlled by organised hunting, one argument runs, they would be subject to all kinds of indiscriminate shooting, gassing etc; this would be cruel.

30. See for example L. Birke, *Women, Feminism and Biology* (Wheatsheaf, Brighton, 1986).

31. See A. Arluke, 'Moral elevation in animal research' in G. Albrecht ed., *Advances in medical sociology* (JAI Press, Greenwich CT, 1990); M. Michael and L. Birke, 'Accounting for Animal Experiments: Credibility and Disreputable 'Others', *Science, Technology and Human Values* 19 (2) (1994), pp.189-204; M. Michael and L. Birke, 'Animal Experimentation: Enrolling the Core Set', *Social Studies of Science* 24, (1994), pp.81-95.

32. For example, J. Masters, 'Revolutionary Theory: Reinventing our Origin Myths' in L. Birke and R. Hubbard eds, *Reinventing Biology* (Indiana University Press, Bloomington, 1995).

33. This argument, of course, may be read as implying that nonhumans' interests can only be met when the nonhuman is in a human context or relationship; the corollary of that is the implication that the nonhuman has no intrinsic importance or interests outside of that (human-defined) context. We do not believe that - which is why we argue that some use of the concept of rights must remain for now. What we seek to argue, rather is that - for those animals whose lives are deeply entwined with ours - there is a pressing need to understand how to converse with them, to establish greater mutuality. Poor creatures that we are, we humans can do so only from an understanding of our own social engagement with other humans.

34. Indeed, as Kate Soper notes in relation to the relative merits of 'culturalist' versus 'naturalist' arguments in ecopolitics, we should not expect any arguments to lead transparently and unproblematically to 'good politics'. Any such argument can be 'appropriated' by political groups which the originators of those arguments find offensive. Warrants in terms of 'rights' or 'hybrids' will always be subject to such

appropriation. All we have attempted to do here is expand the armoury of arguments. See K. Soper, *What is Nature?* (Blackwell, Oxford, 1995).

35. D. Haraway, *Modest Witness@Second-Millenium.FemaleMan Meets OncoMouse: Feminism and Technoscience* (Routledge, London, 1997). Also see n. 24.

Biography

Lynda Birke is a biologist and feminist associated with the Institute for Women's Studies, University of Lancaster. Her work focuses particularly on feminist studies of science; her published work includes *Women, feminism and biology* (1986), *Tomorrow's Child* (1990, with two others), *Feminism, Animals and Science* (1994), *Reinventing Biology* (1995, edited with Ruth Hubbard) and *Common Science? Women, Science and Knowledge* (1996 with J. Barr).

Mike Michael is with the School of Independent Studies, University of Lancaster, United Kingdom. .

BABE : THE TALE OF THE SPEAKING MEAT; PART ll

Val Plumwood

SYNOPSIS OF PART 1: In Part 1, I suggested that the film *Babe* provided a valuable context in which to discuss the replacement of the Cartesian mechanistic model of animals, which has dominated the industrial world since the Enlightenment, by a communicative model which is more suited to survival in an ecological age. The film offers a recognition of communicative virtues and characteristics as central to both human and nonhuman forms of life, and a vision of the emergence of communicative forms of relationship as victorious alternatives to forms based on violence, domination and terror. Focussing on the paradox of the speaking meat the leading character Babe represents, I argued that one of the great strengths of the film is that it invites us to challenge some of the blocks and erasures which support our denial of the meat animal as a communicative subject. As *Babe's* drama of recognition reveals the multiple insensitivities and denials of kinship that are part of the meaning of meat in our society, we can grasp the possibility of alternative meanings that recognise food as kin. I outlined a context-sensitive approach to vegetarianism which refuses cultural universalism and recognises the radically different ethical meanings meat can have in different societies. Finally I explored some of the ethical and political ambiguities of communicative forms, and the tantalising questions *Babe* raises about the communicative farm. Will the new communicative paradigm be used to liberate the sheep and the other farm animals, or merely to oppress them in more subtle and self-complicit ways? Will the communicative animal farm stand to the mechanistic farm as the hegemonic communicative forms of liberal democracy stand to the more repressive forms of patriarchal-authoritarian governance they replaced?

NOW READ ON to discover in PART 11 the moral ambiguities of the human-animal contract, the conceptual traps of pet/meat and person /property dualism, and why we need a politics of animal justice.

4: Communication and Anthropomorphism

Babe's opening shot shows Babe waking in communicative interaction with siblings, expressing sorrow at the loss of his mother and fear as he is seized and carried away. These are all emotions we can realistically expect real pigs to feel and express in this situation, and Babe's 'human' speech as it emerges in this context seems a natural expression of these emotions, wishes and beliefs. The animal communication introduced here works well because it continues and extends the normal body language and communication of the animals. Nevertheless, the representation of such animal subjectivity in human terms is often said to be irresolutely problematic and invalidly 'anthropomorphic'. It is worth considering and clarifying this charge in relation to the representation of animal communication and subjectivity in works of art. I will argue that there is no good basis for the general claim that an artwork is invalidated by anthropomorphism merely on the ground that it attributes subjectivity and communication to nonhumans. The problems in representing other species' communicative powers or subjectivities in terms of human speech are real, but they do not rule out such representation in any general way, and they pale before the difficulties of failing to represent them at all, or before the enormity of representing communicative and intentional beings as beings lacking all communicative and mental capacity. That is a much greater inaccuracy and injustice than any anthropomorphism could be.

We need to distinguish various senses of anthropomorphism, including general and specific senses. The general concept and charge of anthropomorphism, as Mary Midgley[1] has argued, is in its usual sense and definition thoroughly confused. It is ambiguous as between attributing to nonhumans characteristics humans have (OED), and attributing to nonhumans characteristics only humans have. Both senses are problematic, in slightly different ways, when used to support the claim that the attribution of characteristics such as subjectivity to animals must be anthropomorphic. The first sense, that something is anthropomorphic if it attributes to animals characteristics humans have, implies that there is no overlap of characteristics between humans and nonhuman animals. That is, it assumes a hyperseparation of human and animal natures and attempts to enforce upon legitimate representations of

nonhumans such a radical discontinuity. This sense should clearly be rejected, not only because it is based on a demonstrably false assumption of radical discontinuity, but because it can be used to delegitimate virtually any depiction of nonhuman subjectivity that made sense to us.

The second sense of anthropomorphism - attributing to nonhumans characteristics only humans have - is not open to this objection, but is open to the objection that its use to delegitimate the attribution of subjectivity and other contested characteristics to nonhumans is simply question-begging. It assumes just what is at issue, what opponents of the mechanistic model contest, that nonhumans do not have characteristics such as subjectivity and intentionality humans also possess. As Midgley notes, the focus of this sense of the concept tends to be otiose and human-centred. If something is to be faulted for attributing to nonhumans characteristics they do not have, it is sufficient to point out that this is an inaccurate way of representing them, and the inaccuracy itself provides (in a suitably veridical context) sufficient independent ground for rejecting such an attribution. Unless there is a good reason for addressing the question of similarity to humans, it is simply anthrocentric to go on to bring every source of comparison and focus of assessment back to humans and to an animal's similarity or difference from them, as the concept of anthropomorphism tends to do.

The critic of representing animals in communicative terms often draws on another sense of anthropomorphism which is closely analogous to the concept of weak anthrocentrism[2], and which, like weak anthrocentrism, makes it very hard or impossible for representations of nonhumans to avoid being assigned the label anthropomorphism. This is a weak sense which locates anthropomorphism in the presentation of animal communication 'in human terms', from a human conceptual location. Any representation of the speech-content for a human audience will have to be an interpretation in terms of human concepts, and in that weak sense, a background level of anthropomorphism is always likely to be present. What is much more difficult to demonstrate is that anthropomorphism of this background kind, in the weak sense of employing a human conceptual apparatus or conceptual location, is necessarily harmful or invalidating, or that there are no practices which can counter it.

Where the charge of anthropomorphism can lead to the application of more stringent standards to the representation of animal communication than are used to judge the success of comparable human representation, it is itself liable to the counter-charge that it is anthrocentric. Arguments of this kind are often advanced to show that any representation of animal communication is rendered illegitimately anthropomorphic because of problems of translation and indeterminacy, although problems are also familiar in the representation of human cultural difference. There are parallel difficulties for both cross-cultural and cross-species representation: a weak cross-cultural analogue to background anthropomorphism is involved in virtually any translation project, for example, in any attempt to 'bring over' one culture's forms into another's. To avoid delegitimating all such attempts, we need to distinguish the impact of weaker and stronger forms of anthropo- morphism, just as we need to distinguish weak and usually harmless forms of anthropocentrism from strong and damaging forms.[3] Weak forms are unavoidable but not necessarily harmful, while strong forms may be damaging but are by no means inevitable. As with anthro- centrism, the confusion between the two forms gives rise to the illusion that damaging forms are inevitable.

Once we proceed beyond these weak general senses, the concept of anthropomorphism is somewhat ill-defined, and the features being problematised under that description can usually be better characterised in terms of anthropocentrism rather than anthropomorphism. But in the same way, the charge of anthropocentrism cannot be used in a generalised form to delegitimate representations of nonhumans as communicative subjects. There may still sometimes be a point to the charge of strong anthropomorphism, but it becomes much harder to demonstrate. As in the case of weak anthrocentrism, the question is not whether or not some degree of humanisation of perspective is present in any particular human representation of animal communication, for it always will be at the background level, but how damaging it is, what is its meaning, and what practices can be used to counter it? Since the inevitable presence of background levels of anthromorphism means that the charge of impurity can always be raised, it is helpful here to

distinguish the motives for raising it. Are there ever legitimate problems the charge points to?

We have seen that a commonplace motivation for raising the charge of anthropomorphism is a rationalist-Cartesian policing of human-animal discontinuity, to maintain the human observer's distance from and indifference to the animal observed. Although there is in response to the dominant Cartesian-rationalist stress on discontinuity often a need to provide a counterstress on continuity between the human and animal, the question of anthropomorphism can often be raised with some greater validity in the context of the denial of difference which is a key part of structures of subordination and colonisation to which animals are subject.[4] The charge of anthropomorphism may then legitimately draw our attention to a loss of sensitivity to and respect for animal difference in humanisation or in representation. The concern about lack of respect for difference can extend to cover even well-meaning animal rights attempts to assimilate animals within the model of the person, in contexts where there has been no associated attempt to deconstruct the person/property dualism formative of liberalism.

But there are a host of dangers in this area uneasiness about anthropomorphism may reflect: the infantilisation of animals which their insertion into the structures of the private household as pets or their treatment as adjuncts to human children tends to produce is just one of the forms of humanisation associated with the structuring of what domestic animals can become in terms of the limiting slots available for them in human society. The charge of humanisation can draw attention to the reduction of the animal which appears in demeaning or subordinated forms of humanisation. But some kinds of uneasiness about the influence of the human are less warranted. It is only too easy to adopt here over-strong criteria which unwittingly re-invest in human-animal dualism through the assumption that the only genuine animal is the wild animal, the animal completely apart from and uninfluenced by human society, (just as the only genuine indigene is one who looks and sounds exactly as before the days of contact). The genuine problem here is not so much human influence and relationship itself, which is not inevitably corrupting or demeaning, but the reduction of animals which

so often accompanies their insertion as subordinates, deviants or resources into an anthropocentric culture. A solution does not have to try to maintain or represent an 'ideal' pure animal uninfluenced by interaction with the human - although every effort should be made to maintain wild animals in their own ecosystems - but to reach out for relationships that allow for both species together some kind of fullness of becoming, or, as Freya Mathews puts it, allows the animal to 'achieve a significant degree of the form of self-realisation appropriate to its particular kind'.[5] The mixed farm of *Babe* showed some of the possibilities here, especially for the working dogs.

A parallel set of issues arise in the case of representation. As in the case of the human other, so in the animal, such representations must always raise questions about supplanting and assimilating the other. However there can be no general argument that such cross-cultural perspectives presenting another's viewpoint, are deceptive or illegitimate. Cross-species representation, like cross-cultural representation, is not automatically colonising or self-imposing, and may express motives and meanings of sympathy, support and admiration. Rather, specific cases have to be argued on their merits, not just in terms of the alleged intrusion of non-indigenous or human impurities, but in terms of the kinds of insights they present or prevent and the moral quality of their representation.[6] We need to put into place here counter-practices which oppose colonising tendencies in these contexts. For example, representation should keep in mind the distinction between claiming to be rather than to represent an other's perspective, to see or speak as the other rather than to see or speak with the other.[7] In the case of translation and indeterminacy, counter-practices could require an effort to note non-equivalences in forms of life and to treat difficulties about translation as sources of uncertainty and tentativeness. Using the problems of such an approach as a model, we might expect an appropriate methodology for dealing with cross-species conceptual difference and translation indeterminacy to be one which stressed corrigibility and open expectations. Dealing with both human and nonhuman cases of translation indeterminacy requires openness to the other and careful, sensitive, and self-critical observation which actively seeks to uncover perspectival and centric biases[8].

So I don't think it can be argued that *Babe* is lacking in proper respect for animal difference because it represents animal subjectivity and communication in terms of human language, any more than it can be argued that cross-cultural translation is inevitably hegemonic. Undoubtedly there can be great variations and moral differences here, but again, we cannot reject as automatically colonising the mixed or impure perspective which places a human subjectivity into an animal situation. Indeed, as the Larsen cartoon about why dinosaurs died out demonstrates, such 'anthropomorphic' transferences of perspective may be not only funny but philosophically revealing, about ourselves as well as about the other. They can enable us to enter into, if not the other's subjectivity, the other's situation, and that can contribute to our understanding and sympathy. Here, much depends upon the stance the work takes towards the anthrocentrism it represents: rather than being the bearer of an insidious and unexamined inferiorisation of the other, the imposition of an obviously human framework may be the joke, a joke that is partly on us, and which precisely invites reflection about human importations.

Cross-species representations then are not necessarily but can be unacceptably human-centred. Our civilisation is haunted by animal images, but those images themselves are often made complicit in the project of subordinating real animals and eliminating them from our lives. The privileging of the representation of animals over the animals represented is a widespread form of human-centredness which is symptomatic of the growing success of the project of human self-enclosure. This danger is especially acute in cases like *Babe* where films use living animal actors, rather than more indirect forms of representation. The animal justice movement has been right to raise questions about the treatment of animals actors in animal films during and after film-making, although perhaps less right where it has ignored the difference between the willing participation of domestic animal actors and the coerced participation of wild animals, and insisted upon conditions so stringent that they would prevent any participation of domestic animals in filmic events.

The project of human self-enclosure and its privileging of animal representation over animal lives is routinised in popular representations of animality. Compare the kind of humanisation displayed in *Babe* with the Disney paradigm of humanisation. Disney cartoons, as John Berger has noted, are usually only superficially about animals; Disney characters with stereotypical animal bodies often have totally humanised personalities, frequently incorporate little or no recognisable reference to the characteristics or situations of the animals represented, and are permitted no critical reflection on their relationship to the human community or membership of the mixed community. The animal form appears in this anthrocentric conception as a nullity which is made to bear the burden of meanings which have no connection with the animal's own subjectivity or situation. The Disney paradigm, normalised in television cartoons, is one in which animals are, in John Berger's words, 'totally transformed into human puppets' whose main role is to naturalise various hegemonic forms of the human condition by attributing them to the animal 'kingdom'.[9]

The erasure of animals in the Disney animal cartoon is objectionable for reasons that directly reflect its anthrocentrism and its contribution to the incorporation of the other, in this case expressed in the inability to encounter the animal respectfully as an independent other who is more than a disguised form of self. These movements to incorporate the other also underlie the highly anthrocentric assumption I criticised above, that an 'animal film' can only be taken seriously to the extent that it is actually about humans. In contrast, a less anthrocentric and belittling treatment would take animals seriously as agents, communicative subjects, bearers of knowledge, and members of the mixed community who are themselves able to observe us and perhaps to reflect critically on us and their relationships with us. On these sorts of criteria of anthrocentrism in the treatment of the animal other, I think 'our Babe' comes out rather well. 'Eatin' pigs! Barbaric!' exclaims the ewe Maa when she learns of the Hoggett's intention to eat Babe. The animal gaze, we are reminded, can also capture and evaluate us.

The criminalised, women, animals - all these are bearers of a denied or lessened form of subjecthood, which cannot itself command the position

of knower but which is the object of an arrogant form of knowledge which so stereotypes and denies their difference and their speech that they are obliterated as possible subjects of reciprocal exchange or dialogical encounter. As Foucault notes, to be always under such an arrogating observation is also the fate of the prisoner, and as feminists have pointed out, a feminised subjectivity is one in which the subject internalises such a male gaze. John Berger[10] has claimed that this arrogating conception of the other has now gone so far for animals that the animal proper is now irrecoverable for us as a possible other for encounter and communicative exchange. He writes: 'animals are always the observed. The fact that they can observe us has lost all significance. They are the objects of our ever-extending knowledge. What we know about them is an index of our power, and thus an index of what separates us from them. The more we know, the further away they are'.[11] This diagnosis is acute but perhaps too fatalistic. There are cultural means to problematise and subvert these anthrocentric conceptions of the animal, to recover the animal as subject and reciprocal observer rather than as background, passively observed object; it is encouraging then that in the final shot of *Babe,* it is the animal who looks back.

5: Meat and the Colonising Contract

Among the film's other pleasures are the way the lead character Babe, from his position as speaking meat, systematically disrupts each of the background assumptions of meat I identified in Part 1. In the initial scenes of the film, we have (briefly) to confront the first assumption of the multiple and emphatic denials of kinship presupposed by the factory farm, and the second as we are introduced to the meat as a speaking subject. The third assumption, that of a neat, rational and unproblematic hierarchy of considerability based on intellectual ranking, is systematically disrupted by Babe and several other characters throughout the film, and this is one of its best subversive achievements. Thus Babe's assertion of intelligence and communicative status disrupts Fly's comfortable assurances to her puppies that 'only stupid animals' are eaten. This disruption poses ethical and political questions, analogous to questions arising in post-colonial theory about the role of colonial hierarchies, about the distinction between meat and non-meat animals,

and about the nature of the human contract with that special, more privileged group of animals who can never be 'meat'.

'Babe' is the name of an innocent, an original, Christlike pure soul, to whom the first news of the dirty secret of meat is eventually revealed in the outhouse by the revolutionary duck Ferdie - where the meat comes from, where Babe ('babies') himself comes from, in an act of disillusionment which neatly parallels that of the human child newly discovering reproductive and sexual relationships. ('Not the Boss!' breathes the incredulous Babe, in parallel with the child's shocked 'Not my parents!') But it is from the malevolent cat that Babe finally learns the full hurt of the dreadful secret the factory farm and the sinister farm meathouse hold. The unspeakable is finally spoken: pigs are meat, pigs are subjects, and pigs suffer the reductive violence which denies, distances from and hides their subjectivity. Babe is only called 'pig' while he is alive, but 'they use a different word, "pork or bacon", after you are dead', explains the satisfied cat, revelling in her privileged, protected status. As Babe's innocence is stripped away bit by bit, we see the gradual unveiling of various levels and kinds of animal oppressions and colonisations - the baring of the 'world of wounds' we all somehow learn to come to terms with as part of our loss of innocence and 'adult' accomodation to an oppressive world.

Positioned as counter to these unveilings of oppression are various emancipatory comments and viewpoints from the animals who appear as sceptical and critical spectators of the human show. Their comments deftly expose the politics of the mixed community, especially its human violence and surrogate dog violence, and the strangeness of human ways. They give us positive perspectives on the importance of listening to and being open to others, and on the injustice, distortion and violence of the exclusionary boundaries which keep Babe positioned as meat. We feel the thrill of broken chains, the excitement of emancipation as Babe is gradually enabled to break the boundaries which keep him positioned as meat, finally crossing the privileged threshold of the house from which he has been so pointedly excluded to watch television with the farmer and Babe's surrogate dog mother Fly.

What I found particularly illuminating here was the exposure of the levels of hierarchy among animals created by human colonisation in the small human empire of the farm, an empire which makes concrete human desire and human will in its social relations and its rational design of the earth and of the animals themselves. The film displays the key role of these boundaries of exclusion and levels of hierarchy among animals in maintaining the practices of meat and the non-subject status of the meat animal. The dogs, in the canine equivalent of human chauvinism, attribute their privilege with some complacency to their greater intelligence, but that facile fabrication is disrupted for us nicely by Babe's pig intelligence in some of the film's earliest scenes. What is exposed as unstable, duplicitous and oppressive here is the conventional boundary and contract on which the relatively privileged status of the pet and 'house' animal is based, which bears on the privileged status of dogs and cats in Western society.

Because it reveals the conventionality and instability of the considerability hierarchy among animals, the film provides us with the materials to reconstruct the Contract or political origin story for the privileged group of 'pets' or personal companion animals. In early times, hunting, farming and shepherding man ('the Boss') in certain societies made a contract with certain wolves: the contract was that they would be given a respected role and position very different from that of other animals, that they would never be meat, in return for help with a critical task. That task was their active help in the oppression and imprisonment of other animals, whom they would, using their more-than-human sensory or physical skills, help confine and construct as meat. In return for their help in constructing other animals as meat, not only would they themselves never be meat, they would be 'looked after', given a share of the meat themselves. Their subjectivity would be recognised, and the reductive Cartesian conception would never apply to them. The working animal might often be a 'familiar', like the sheepdogs in *Babe*, the subject of a deeply personal relationship, but also accorded the dignity of a co-worker and acknowledged for their skilful contribution to economic life. In the same sense that various human mythic Contracts or founding political stories are about dividing the spoils, this was a Contract not only about cooperation in economic life but about mutual benefit in

meat. But as the disruptions of *Babe* neatly demonstrate, inclusion in the contract class has nothing to do with 'intelligence', and everything to do with complicity.

This Old Contract, originally a cooperative work contract according privilege in return for complicity in the practice of meat and the domination or elimination of the non-contract animals, is later under the Modern Contract extended to the privileged companion animals - the pets - with whom so many of us continue to share our lives, but extended in a new form. As production moves out of the household at the beginning of the modern era, the role of farm-household animals is transformed in the new separation of public/private in much the same way as the role of women. Both the working farm wife and the working farm animal now become subject to the modernist polarity that construes 'rational' economic relationships in alienated, masculinist and narrowly instrumental terms as hyperseparated from moral and affective familiar relationships, and affective relationships as occurring in a highly circumscribed 'private' sphere of altruism supposedly untainted by economic considerations. The 'familiar' working animal of the contract class is replaced by the bourgeois 'pet' who, like the bourgeois wife, leads a sheltered life in a protected private household.[12]

The hyperseparation between the 'pet' animal and the 'meat' animal is intensified as the meat animal becomes subject to the rationally instrumentalised mass-production regime of the factory farm or laboratory. The 'familiar' animal disappears, and the complementary polarity of the subjectivised and underemployed 'pet' animal and the reduced and instrumentalised 'meat' animal takes its place. As *Babe* reminds us, the 'familiar' working animal could integrate reason and emotion, economic and affective, public and private, elements and exemplify animal skill, difference and mystery.[13] In the Old Contract relationship (at its best), 'familiars' were skilful and respected co-workers, whose economic role was based on their difference from the human and their consequent ability to extend human senses and human powers; in the Modern Contract relationship (at its worst), the pet is a servile toy or dependent lacking both autonomy and mystery, often conceived in humanised terms as a childlike or inferior self, and for such

structural reasons increasingly marginal to human lives.[14] These are of course the extremes of a possible continuum, but one that in practice tends to be configured in response to the political forces underlying the Old and Modern Contracts. If the pet and the meat tend now to monopolise the roles these forces have left open, what has disappeared is the possibility of the animal 'familiars' *Babe* reimagines for us - the same animals integrated into our economic as into our affective lives, and at the same time the possibility of a less alienated form of economic life which integrates not only the real but the symbolic animal in the form of affective creativity.

For urban dwellers, which is, increasingly, most of us, animals of the Modern Contract class of pets usually now represent our main contact with the animal world. This is unfortunate, because the Modern Contract defines the pet in opposition to the meat animal and reflects and repeats many of the duplicities, denials and exclusions involved in the surrounding western institution of meat. The exclusionary form of the original contract of complicity in meat is retained and intensified in the Modern Contract with the pet, usually a carnivore whom the owner continues to feed on the flesh of other 'meat' animals. The malevolent cat in *Babe* is seen thus profiting from the death of the Christmas duck Rosanna; in real life, non-privileged animals assigned to the 'meat' side of this dualistic hierarchy die to make meat for the pets of people who think of themselves unproblematically as animal lovers - kangaroos, dolphins, penguins, anonymous and rare marine animals in yearly billions are slaughtered at some remove to feed the cats and dogs whose own deaths as meat would be unthinkable to their owners.

If the 'pet' is defined in terms of the same Modern Contract that defines the 'meat' animal, we can understand as complementary constructions the strongly dualistic boundaries of the 'pet' and 'meat' animal; the pet animal is a communicative and ethical subject, ideally subject to consideration and fit for human companionship, the meat animal is none of these things. If the pet and the meat are complementary polarised aspects of the same contract, it is this tainted and hidden relationship that enables our simultaneous claim to love some animals and to have a right to ruthlessly exploit other animals who are not very different, to

simultaneously admit pet subjectivity and ignore or deny meat-animal subjectivity. The Old Contract dignified the role of contract animals, but presupposed an instrumental relationship to other animals, and this division becomes a pet/meat dualism in the contract of the modern era. This genealogy does much to explain the extraordinary contradictions involved in our contemporary treatment of animals and our claims to love and respect animals. For example, it is these dualistic contracts that 'animal lovers' honour when they, perhaps even sometimes as vegetarians or vegans themselves, bring into existence and even breed carnivorous pet animals whom they feed on the 'meat' of other animals; or whom pet lovers irresponsibly introduce to inappropriate environments where they are permitted to make other animals meat and to disrupt carefully balanced and negotiated communities of free-living animals. The dualism of the Modern Contract forms the background to such abuses as the dumping of domestic cats in the wild by 'animal lovers', to become a menace to indigenous animals in contexts like Australia where there are few checks and balances.

The moral dualism of both the Old and the Modern Contract helps construct the taboo against recognising the subjectivity of the meat animal, as well as the general failure to recognise animal subjectivity, and produces the moral evasions of meat, especially factory-farmed meat. Most modern urban dwellers have had some positive experiences with animals such as dogs or cats, have at some time allowed themselves to experience them as narrative and communicative subjects rather than as Cartesian 'machine-animals' or as mindless bodies. But the ethical dualism and impermeability of this contract boundary prevents them transferring this awareness to other animals considered 'meat animals' or to wild animals, reflected in the contradiction of the animal lover's horror taboo against eating dogs and contrasting indifference or complacency about the horrific treatment of the 'meat animal'. The recognition drama of *Babe* takes us some distance then towards pushing over this key barrier to a better consciousness of the moral and ecological status of all animals, showing us how Babe is excluded from contract status as meat, and how both Babe and the sheep are oppressed by the contract and by the privilege of the dogs and cats.

But in another crucial way the film fails to resolve some key ambiguities surrounding the contract. For we can also read Babe's liberation in the end of the film as his joining or displacing the dogs in the contract, recasting him in the role of non-violent communicator with the rest of the farm animals. Is Babe's liberation then to be set within the Old Contract's complicity in the oppression of non-contract animals, and the Modern Contract's dualism of the meat and the pet? Is it merely the correction of a mistaken individual placement in the hierarchical species order of rational meritocracy the contracts preserve? Or does it open up a new possibility: that Babe's liberation can somehow be extended to all other animals? To the extent that it is an exclusionary contract, in which some make a living by complicity in instrumentalising, imprisoning and oppressing others, the contract cannot be extended to provide liberation for all. The attempt to use such a contract as a basis for liberation only succeeds in re-erecting the barrier of moral dualism in a new place, slightly extending the class of persons while leaving the person/property dualism unquestioned.

Here we come up against the limits imposed by the liberal understanding of liberation as individual salvation and by its occlusion of its key underlying dualistic constructions, which applied to the animal sphere generates the same problems that various human liberation movements encounter with liberalism. If Babe is to be saved within the limits of privilege the contracts define, or because he is included in the category of persons in recognition of his newly-discovered resemblance to the human and discontinuity from other animals, we can recognise this as the same colonising contract some forms of liberal feminism have endorsed, to allow the other to survive at the price of bringing them under the sign of the Same and to elevate a few through complicity in the oppression of others. Feminists such as Elizabeth Cady Stanton, for example, argued that women should be admitted to the privileged class of political rightholders in virtue of their discontinuity with allegedly 'lower groups' such as negro slaves, and their similarity to the master group, elite white men. The strategy of extending the category of persons without recasting the person/property dualism in which it is constructed is bound to fail as an attempt to elevate animals, for exactly the same reasons that similar liberal feminist strategies were/are bound to fail. The door opens to admit

a few, but closes to keep the rest outside where they were. One boundary of moral dualism is momentarily penetrated, but the rest remain in place or new ones are constructed. So the film apparently displays Babe's liberation, but leaves us with the big questions about whether Babe will be admitted alone, with all other pigs, with some other pigs, with all other animals, or with everything we might consider food?

An anti-anthrocentric culture would, I think, need to reject the colonising aspects of the Old Contract Babe shows us, in which 'the Boss' undertakes to allow familiars the meat of other animals that are treated as beneath moral consideration. But it would need to reject too the Modern Contract in which 'pet' and 'meat' animals are defined in dualistic terms as hyper-separated and complementary animal categories, with the hyper-subjectivised and emotionally-invested 'pet' privileged over the undersubjectivised and emotionally-divested 'meat'. Pet/meat dualism resembles male/female dualism in its complex relationships and interconnection with other dualisms; thus pet/meat dualism is closely associated with and draws on several of the major dualisms that define the economic life of liberal modernity, such as public/private, reason/emotion, urban/rural and person/property, and there are strong resonances with race and gender dualisms for these as well as other reasons.[15] Pet/meat dualism may be seen as a special case of the larger liberal person/property dualism, in which the pet is treated as a de facto person, marginally recognised in law, and the meat animal is included in the larger category of animal economic property.

Feminists have argued that a proper understanding of liberalism requires an understanding of its gendered dimensions in connecting the public/private, reason/emotion and male/female dualisms[16]; it might equally be said that understanding liberalism requires an understanding of its animal dimensions, in connecting the human/animal, pet/meat person/property, public/private, and reason/emotion dualisms. We have already noticed in part 3 that there is a radical kind of inequality and a-reciprocity in modern commodity practices of meat that is often not present in the society of the hunter-gatherer, where carnivorous practices could express not so much superiority to animals as human inclusion within a common human-animal realm of reciprocal predation and life-

exchange. So marked is this that 'meat' can be said to have a different meaning in each of these political contexts. An important implication for theory of both these sets of observations is that to understand our contemporary patterns of relationship with animals we need a more clearly socially and especially politically nuanced and situated analysis of these categories than is achievable within the confines of an animal ethics framework. That is why I have used the term 'animal justice' instead of the terms 'animal rights' or 'animal defence'.

Moving beyond the contracts[17] does not imply that we have to forgo all systematic association with animals, but rather that we have be prepared to consider carefully the politics of human/animal relationships and test them against the criterion of realisation in a society where none are morally excluded and made available for the horrors of the gulag. But if the concept of the 'pet' is tainted by the same contract and public/private duality that defines the 'meat', where do we start? I think that the attempt to negotiate a new communicative model of relationship with animals could do worse than start from the concept of the 'familiar' *Babe* makes visible again, because the 'familiar' relationship escapes some of the rigidity of the pet/meat dualism; thus the relationship with the working animal was often strongly communicative, built on a respect for animal difference, and unified rather than split the rational-economic and emotional connection with the animal. Your new familiar could be an animal with whom you form some kind of communicative bond, friendship, protective relationship, companion-ship, or acquaintance. The familiar may, if you are very lucky, be a wild free-living animal in your local surroundings you see sufficiently often to come to know individually. Relationships with local lizards, birds, and occasionally friendly mammals like wombats, are examples. Or they may be a domesticated or semi-domesticated animal with whom you have economic as well as affective relations not dependent on the moral exclusion of other animals. These possibilities start to become available to us once we begin to see beyond the dualisms that underpin the contracts.

An attempt to rework the 'familiar' relationship for a new time must clearly reject the familiar's traditionally oppressive roles in relation to

other animals. But many of the domestic animals who suffered under the contracts, hens, ducks and geese for example, thrive as human familiars and can live with us in ways that enable the formation of communicative relationships, mutual enjoyment, and exploration - without requiring a further class of excluded animals who exist instrumentally to provide them with meat.[18] We have to ensure that we take responsibility for any harm our familiars may do to ecological communities or to communities of free-living animals, whose welfare I believe should, in the event of conflict, take priority over our desire for animal companions, and in many if not most contexts this must mean abandoning the fostering of dogs and cats. Combining this new/old kind of 'familiar' personal and moral relationship with animals with an economic relationship, as *Babe* imagines, is challenging, to say the least, and involves negotiating so many difficult tensions that it must ultimately lead towards a major revisioning and restructuring of economic life. But the potential rewards are great, and such a strategy also indicates routes towards breaking down those key contemporary versions of reason/emotion and public/private dualism that help construct the linked forms of alienation involved in the human workplace and the animal gulag. To the extent that *Babe* helps us reimagine the animal as potential familiar rather than as pet or as meat, it offers us a glimpse of an overgrown but still discernible path which could begin our journey towards a non-oppressive form of the mixed community and a livable future respectfully shared with animals.

Notes

1. Mary Midgley, *Animals and why they matter* (Penguin, Harmondsworth, 1983).
2. Val Plumwood and R. Routley 'Against the Inevitability of Human Chauvinism', in E. E. Goodpaster and K.M. Sayre eds. *Ethics and the Problems of the 21st Century*, (Notre Dame University Press, South Bend, Indiana, 1979).
3. Val Plumwood, 'Androcentrism and Anthrocentrism: Parallels and Politics, *Ethics and the Environment*, 1, (1996), pp. 119-152. Anthrocentrism is a clearer concept than anthropomorphism although by no means uncontested or unambiguous, and one which also bears more clearly on the moral quality of artworks that represent the animal.
4. Thus post-colonial theory particularly stresses difference, even in some instances defining itself as 'that thought which refuses to turn the Other into the Same'.

5. Freya Mathews, 'Living with Animals', *Animal Issues*, 1, (1997), pp. 4-20.
6. See Val Plumwood, 'Review of Marlo Morgan's Mutant Message Downunder', *Environmental Ethics,* Winter, (1996), pp. 431-435 and 'Eurocentrism, Positionality, and Cross-Authoring' manuscript.
7. Donna Haraway, 'Situated Knowledges: the Science Question in Feminism and the Privilege of Partial Perspective' in *Simians, Cyborgs and Women* (Association Press, London, 1989), pp. 183-202.
8. Sandra Harding, *Whose Science, Whose Knowledge?'* (Open University Press, Milton Keynes, 1991).
9. John Berger, *About Looking* (Vintage, New York, 1991), pp.3-28.
10. Ibid.
11. Ibid, p.16.
12. This is often only relatively a privileged fate, relative to that of the meat animal. The story of the happy, privileged private pet is idealised for the housebound animal in much the same way as it is for the housebound wife. In practice both suffer and are vulnerable under a form of coverture which allows the household head many opportunites to abuse them with little redress (Adams 1994) see n.15. Both suffer endless ennui, confinement and the indignity of underemployment or uselessness, and both may be limited and distorted in their development by their role of supplying emotional support for hyperrational masters. At the same time, the need to integrate and confine the animal companion to the space of the individual private household is a further source of limitation, deprivation and assimilation for the animal and of corresponding stereotyping and limitation for human knowledge of companion animals, since it both limits what the pet animal can become and greatly contracts the range of suitable companion animals. The pet's positioning within this privatised structure also supports its infantilisation.
13. The farm wife too had an important economic role, and although that hardly amounted to equality, had to be accorded some respect on account of it.
14. So bringing animals back into human lives cannot just be a matter of better planning, but also requires more far-reaching changes.
15. Carol Adams, *Neither Man nor Beast* (Continuum, New York, 1994).
16. Carole Pateman, *The Disorder of Women* (Polity Press, Cambridge, 1989).
17. I have not proposed a New Contract to replace the Old and the Modern Contracts because I think, with Mary Midgley in 'Duties Concerning Islands' in Robert Elliot and Arran Gare eds. *Environmental Philosophy* (University of Queensland Press, St Lucia, 1983) and Carole Pateman (1989), see n.l6., that the contract framework is highly problematic and exclusionary.
18. Individualisation is another factor that makes such relationships of familiarity difficult to achieve in the contemporary West. The reduction of the domestic animal's living possibilities to that of being an individual human household member on the one hand or gulag inhabitant on the other leaves out the possibility of animals inhabiting the larger shared common world of the mixed community- as the village-common geese do, for example, occupying a role which shades off into that of the wild, free-living animal. See Ted Benton, *Natural Relations* (Verso, London, 1993).

Biography

Val Plumwood is the author of *Feminism and the Mastery of Nature* (Routledge, London, 1993) and of over 80 papers in a wide range of areas including feminist philosophy, feminist ecology, feminist ethics, feminist logic, philosophical logic, environmental ethics and political philosophy. She is a research scholar at the University of Sydney, Research Institute for Humanities and Social Sciences. Val's home base is an area of mountain forest in southern N.S.W., Australia. She says that as the foster-mother of a wombat, she tends to look at other animals, especially dogs and cats, from a wombat's viewpoint. As the survivor of a drowning attempt by a Saltwater Crocodile, she also feels that she knows a bit about what it is like to be treated as someone else's meat.

ETHICS, CONFLICT AND ANIMAL RESEARCH

Andrew Brennan

Introduction

The three Rs of Russell and Burch - Reduce, Replace, Refine - are widely agreed maxims of animal-based science. The morally-concerned researcher tries to *reduce* both the number of animals used in science, and the impacts of procedures on them. Animals are to be *replaced*, wherever possible, by techniques that do not use animals. Techniques and procedures are to be *refined* as much as possible to minimise harms. Implementing these maxims is desirable given that much animal-based science seeks to promote knowledge through the deliberate and intentional infliction of harms on other living things, often for the sake of studying these harms themselves.

When we try to engage in moral discussion about which pieces of research using animals should or should not be permitted, we run up against significant problems. In this article, I identify three areas where doubts are specially acute, and suggest that these can be thought of as the three Cs of animal experimentation ethics. The three Cs are not maxims, however. Instead, they indicate areas of difficulty and uncertainty that have to be negotiated before conclusions can be reached. The three Cs, I argue, should be taken together with three other dimensions of moral thinking - details, intuitions and principles. When all these dimensions are plotted, the result is a space of moral argument and perplexity. By drawing attention to some features of this space, I am able in the present article to indicate hidden weaknesses in the present systems for regulating animal research.

Reason, feeling and ethics

By *intuition* is meant the sense or feeling we get in a situation that things are, morally speaking, right or wrong. We often express this sense of moral rightness or wrongness even when we cannot give a very specific, reasoned account of why we have the feeling. But ethics is not just a

matter of feelings. We all recognize the existence of moral rules or *principles*, some of which can be rationally justified. Some of the Ten Commandments of Christianity, or the rule that we should behave towards others as we would expect them to behave towards us, are rules that many people would accept as guides for action. When we give reasons for why an action is right or wrong, we may cite one of these general guiding principles.

How are the two ingredients, reason and feeling, principles and intuitions, to be combined? One project of moral theory is to see if a set of principles can be found which gives a rational justification for our moral feelings. The general idea of this project is that it should be possible to put the two ingredients into balance with each other. If a principle (e.g. 'Always tell the truth') leads to behaviour that does not feel morally right, then the principle has to be modified. Conversely, if our intuitions are out of keeping with a widely-agreed principle, then we can try to educate our intuitions so they harmonize with the principle. In the jargon of theorists, this self-conscious balancing act is an attempt to find a *reflective equilibrium* between principles and intuitions.[1]

For many scientists, the introduction of feelings, or a sense of right and wrong, into discussions is uncomfortable. With the exception of some parts of psychology, feelings are not normally the object of scientific study and the 'official' methodology of scientific investigation leaves little - if any - room for emotions. The scientist is supposed to deal with theory and evidence in a rational, objective manner, unmoved by passions. The supposition is seldom confirmed in real life. In discussions about controversial areas of work, natural scientists become just as vehement as anyone else. But, despite this, they may at other times try to dismiss 'emotive language', as if matters of right and wrong, duty and integrity, are not connected with feelings in any way. Modern moral philosophy shares a part of the scientists' attitudes here. It does not rule out the importance of feelings to morality. But it encourages rational, and impartial, reflection on how feelings can be harmonized with principles. Moral theory sometimes asks us to step aside from our passionate commitments, enthusiasms and deeply felt convictions in order to reflect

on the extent to which they can be brought into conformity with rationally-justifiable principles.

The quest for reflective equilibrium is not always successful. Even when a balance is found, this is not the end of moral debate. People who share the same intuitions and principles can still give different judgments on the same case. For example, a researcher and an anti-vivisectionist may share the same moral point of view. One of them, however, believes that the consciousness and sensation of a certain non-human species is very close to that of humans. The other does not believe this at all. Let us call this a disagreement about the *details* of the case. The term 'details' is used loosely here to cover matters of belief, opinion, probability, theory and speculation, as well as the known and agreed facts of a situation. In this sense of the term, many of the sources of argument about animal research are concerned with the details. Notice that different opinions about what the details of a case are will often result in different moral evaluations.

There are thus at least three dimensions to be explored in moral discussions: details, intuitions and principles. (Buning et al.[2] refer to 'facts' where I have talked about the 'details' of a case). Being aware of these can be of practical help in resolving disagreements. Often, the stumbling block is a question of fact, theory or opinion not of values or ethics. For example, I recall one occasion in which an experimentation ethics committee was uncertain about approving a project involving the study of a particular frog species found only in one habitat in Australia. As part of the research a number of the animals were to be removed from their environment for laboratory study. After some discussion, it became clear that the major issues in the minds of those with worries about the project were two: the relative abundance of the frogs, and the impact of the investigation on the rest of the habitat. Once these *details* had been identified, it became relatively easy to establish parameters under which the project would be able to qualify for approval.

Not all issues can be settled so smoothly. In particular, there will be opportunities for endless conflict on matters of detail which are themselves the subject of different opinions and theories - for example

the intelligence of birds, or primates, in relation to humans, or the claimed benefits of research. Principles and intuitions also collide in fascinating and complex ways. But it would be wrong to think that *contest* is the only problem to be encountered in discussions of ethics. There are three Cs central to ethics - *contest*, *context* and *complexity*. Each one of these deserves separate description.

Contest

It is apparent that ethical issues are often *contested* and some of the problems by which we are most puzzled have no agreed moral answer. This is obviously true of the debates about euthanasia, abortion or screening for genetic diseases. It is not just the factual or theoretical details that are disputed in these cases. Instead there is often a debate between fundamental ethical orientations or principles. In the case of research involving animals this contest is widely recognized. Nearly everyone agrees on some of the *factual* and *theoretical* details, for example, that many of the animals used by researchers have a degree of consciousness and the capacity for pain and pleasure. When Tom Regan writes that animals are subjects of a life, many laboratory scientists would agree. And when Peter Singer points to the existence of animal suffering we can all think of cases where this has happened.[3] So, what is it that divides Regan and Singer from those who support the continued use of animals in research?

At present, the argument between supporters and opponents of animal research seems mainly centred on specific details (matters of fact and theory). Thereafter, there is a second layer of disagreement about the ethical stance that is appropriate in the light of the facts. As to details, there are observations and speculations about the degree of similarity between human and animal consciousness, sensations and lifestyles. On the ethical side, there is contest over whether, for example, it is legitimate to inflict avoidable harms on members of one species in order to secure a benefit to members of another. To disentangle the factual, intuitive and principled issues at stake is a large task and lies beyond the focus of the present article. However, what is said later about levels of concern draws attention to one of the forgotten areas in this debate.

Context

Some of the sciences, for example, chemistry and physics, aim to identify and understand fundamental mechanisms which operate in the same way in all contexts. The laws in these sciences are global - even *universal* (in its literal sense) - in scope. To the extent that they succeed in describing the universe, they have to be mutually consistent. By contrast, social life for human beings is not subject to universal unchanging laws. As soon as we specify a possible principle of conduct, we can think of a context where it seems not to apply or to be in conflict with some other precept. For example, suppose we accept the following maxims: first, that we should be truthful with each other; second, that we should avoid unnecessary harms to another agent. It is not hard to think of a situation where telling the truth may do more harm than staying silent. So, the two precepts come into conflict. So, should we try to live in keeping with just a single principle? This would be a bad idea for many reasons. In any case, it does not solve the present problem. Even if we limited ourselves to the principle of avoiding harm, we encounter conflicts. Consider, for example, a case where doing harm to one agent prevents a greater harm to another. It looks as if it might be impossible to live strictly in keeping with even one principle. For this reason, moral precepts are not to be regarded as strict and exceptionless. Instead, they always have to be interpreted according to the specific case we are dealing with and the *context* in which we find ourselves.

How does context, the second of the three Cs, affect animal research? Many laboratory procedures are more or less routine, for example those involved in antibody production, blood sampling, anaesthesia or euthanasia. However even in these cases, there are often choices about where to draw the blood from, or which adjuvant to use to stimulate the antibody response. Since any of these procedures involve a cost to the animal, it has to be asked whether there is a real need for this procedure at all in the context of the overall research program.

Contextual issues associated with these routine activities are regularly discussed in institutional ethics committees. Not all countries have such

watchdog bodies, but in Australia, for example, where an animal ethics committee system is well-established,[4] questions about the context of procedures are standard fare in discussion of whether to approve a particular proposal. Committees consider in detail whether a given procedure, taking place in a particular project, is justified in light of the aims of the project, the potential benefits, and the skills of the researchers. These are not the only contextual issues. Others may include how often the procedure is to be used, or the maximum exposure of any given animal to a particular imposition.

It should be noticed that laying down standard operating procedures does not preclude a consideration of contextual issues. Any standard protocol for bleeding, pain relief or anaesthesia has to allow for exceptions. For example, in Australia, ether is no longer regarded as a generally appropriate anaesthetic agent for small animals. Experience has shown, however, that for some applications it remains the anaesthetic of choice provided it is used with care in a situation where appropriate precautions are taken. Decisions on when to approve the use of ether are inevitably context-dependent.

Complexity

The third 'C' is *complexity*. Actions and decisions are seldom simple: as the point of view from which we describe something changes we become aware of this. Lunging at someone with a dagger can at the same time be assassinating an emperor and starting a revolution. These three descriptions of essentially the same physical act draw attention to the layers of complexity inherent in it. Until we have thought about what we do from more than one standpoint, we can easily convince ourselves that our actions are simpler than they are. Consider a case where a tiny pump has to be installed under the skin of a rat.To suture the wound tightly can ensure that the pump does not become dislodged. But it can also cause extra post-operative discomfort; by focusing only on getting the sutures tight enough the researchers may overlook the other aspects of what they are doing. When they recognize that getting the sutures tight may not be getting them right then they have started to think about the other aspects

of what they are doing outside the province of science and the aims of the research they are engaged in.

Complexity refers to the capacity for a situation to be multi-layered. From one point of view, implanting the pump securely is central to getting the science done. A different layer of considerations is concerned with the welfare and comfort of the animals. Focusing on one layer to the exclusion of others is fundamental to many conflict situations. Members of ethics committee who have a background in animal care and advocacy will - from the point of view of researchers - sometimes seem to ignore the significance and excitement of the science. From an outsider's point of view, the scientists can seem peculiarly indifferent to the pain or discomfort of their animals, since their focus is on the demands of the research and the interest of the results they are achieving. The layer on which we focus in discussing a case often reflects our own interests. To grasp the situation in its complexity will often require us to pay attention to levels and layers that have not previously come to our attention.

Problems of levels and layers are not the same as those of context. We can see this by focusing on just one context, say the housing requirements for a specific group of experimental animals. Here there will typically be different attitudes taken by investigators and animal care staff. The researchers will normally concentrate largely on the health status of the animals, ease of access, freedom from infection during any healing process that is to occur and other matters that are central to the smooth operation of their research. By contrast, care staff will often be more aware of lighting levels, environmental enrichment, the suitability of bedding materials and requirements for play and companionship. So there are at least these two layers of complexity in such a case.

The two perspectives are often complementary. Adopting both provides us with a richer understanding of the situation of the animals, care staff and investigators. Sometimes, however, the demands of one perspective will be in conflict with the demands of another. Loose bedding, for example, may be desirable for the species in question, but interfere with the results being studied. A case like this may sometimes pose a priority question: which perspective is to be given authority? In a real situation,

the complexity of the issue would not normally be exhausted by considering only two perspectives. Other layers to be remembered would include the nature of the proposed research, its position in a larger intellectual framework, the career interests of investigators and care staff, and so on. Philosophers sometimes distinguish ‘thick’ from ‘thin’ understandings of people and situations. Focusing on just one layer or one dimension of a situation gives us a thin account of it. Recognizing the existence of complexity is to recognize that any research situation is a ‘thick’ one in this sense.

The problems of ethics

Once the three Cs are recognized, it is easy to see that they will interact with details, intuitions and principles to define an area of ethical bewilderment and fascination. For example, we may encounter disagreement not only about the appropriate anaesthetic to use in a particular procedure (a *contextual* issue) but also about the relevance of the procedure to testing the hypothesis under consideration (which arises from thinking about another dimension of a *complex* situation). Likewise, two people may agree in *principle* that a certain procedure is ethically acceptable; they may still disagree over the issue of whether it is right to use the procedure in a teaching demonstration as well as in a piece of research. This latter, contextual disagreement will be a further difference of *principle*.

As already emphasized there are no exceptionless moral principles. In this way, ethics is more like toxicology than chemistry. But it lacks even the regularities found in toxicology. Moral precepts are general guides to action. But the most difficult moral problems come up either in particular situations or in specific classes of case (e.g., abortion, euthanasia, genetic screening, antibody production). As we add detail to the cases under review, we develop two things simultaneously. First, context becomes more clear, and the various dimensions of complexity in the situation start to be revealed. But, second, this often opens the way to further conflict involving facts, intuitions and principles.

Luckily, there are many situations in which the right course of action is clear, and the addition of further details makes no difference to the verdict. So there are many occasions where, for example, we recognize that it is right to do some harm to achieve some good (for example, pushing someone out of the path of a life-threatening danger). But the scientific use of animals is an excellent exemplar of how agreement on principles does not systematically translate to agreement on cases.

Same question - different aspects

As we uncover a situation in more detail, the scope for ethical disagreement can increase. In this section I want to draw attention to two different ways we can think about one general issue: the scale of animal-based research. In a previous paper[5] I used existing sources in the literature together with estimates supplied by Mark Matfield and Andrew Rowan to arrive at the following estimate of scientific uses of animals:

United States	22 million (1986)
European Union	11.8 million (1991)
Canada	2.1 million (1993)
Switzerland	0.86 million (1992)
Australia	0.75 million (1989)
Japan	2.5 million
Rest of the world	10 million (estimate)

This gives a total world animal use in research for the early 1990s of around 50 million - or, allowing for discrepancies and underestimates in returns, perhaps 55 to 60 million. Notice that some writers would argue that a more accurate estimate would be double this figure. If we related these numbers to populations, we find significant variations among countries. For example, in most of the industrial world, animals used in research per million population varies between an upper value of around 120,000 (the United States) and a lower value of around 14,000 (Spain).[5] Again, within countries there are divergences in the distribution of animal use among commercial, government and university laboratories.

A noteworthy fact is that in nearly all countries for which there exists reasonable data, it appears that animal use in science has declined very significantly since 1970, when - again on conservative estimates - total world usage was probably around 110 - 120 million. Let us assume that the fewer animals used in research the better. It follows that the situation by 1990 seems to be much better than the situation in 1970. But this is only one aspect of the question we started with: the scale of animal use in science.

To see this issue from a different perspective, consider the following data drawn from Nicoll and Russell.[6] This time, we are considering all forms of animal use in the United States:

Numbers of Animals Used Annually in the United States

		Percentage of total
Food	6 086 000 000	96.5%
Hunting	165 000 000	2.6%
Killed in animal shelters	27 000 000	.4%
Fur industry	11 000 000	.2%
All teaching and research	20 000 000	.3%

The US Department of Agriculture figures show that Nicoll and Russell appear to have taken no account of animal slaughter for food apart from chickens.[7]

The figures in other categories are no more reliable than those in the first row. The figure for teaching and research is likely an underestimate, and the deaths in shelters have been extrapolated from a very small and untypical data set and so are entirely unreliable. Despite these drawbacks, the figures can be the basis of some generalization. Extrapolation would suggest that in global terms the scientific use of animals represents no more than .25% of total animal killing by human beings. In fact, if we take into account further impacts such as fishing, land clearance and so on then .25% will grossly overestimate the contribution of teaching and research to animal suffering and death.

These new figures provide a different view on the original question: the scale of animal research. Animals used in research count for a minute fraction of human impacts on animals. Their total elimination from science would have virtually no effect at all on human-induced suffering and death in the animal world. The fact that such animal use has declined by 50% over the last twenty five years would now - for some people - hardly seem significant at all. Looking at the data from this new point of view, the same people might ask why research involving animals is so heavily-regulated and widely-debated. Others (including myself) may claim that the allocation of significant resources in this area reveals that animal use in the sciences poses ethical questions of a different sort from those posed by other impacts on animal lives. I have written on this matter in other papers, and will not follow it further here.

What I have tried to show in the present section is that considering the numbers of animals used in research is not a simple matter. Rather, there are layers of complexity associated with this question. Depending on how we locate the issue of numbers, we may be tempted to adopt different perspectives, which themselves can give rise to new questions of detail, intuition and principle. An animal protectionist may emphasise the enormous scale of a world industry dedicated to harming animals for the sake of some dubious human benefits. An animal scientist may respond by indicating how tiny the proportion of animals harmed in research is: more than 250 battery chickens are killed for every animal which dies in the cause of science. Each side has a truth of sorts on its side. But, until each takes note of the perspective of the other, their engagement with the situation remains, at best, partial. .

Levels of concern

The complexity of life is such that we can often become so engrossed in thinking about only one aspect of a situation that we miss other aspects of it. There are many other ways to think about the scale of animal research apart from the two given in the previous section. And there are many different ways to think about specific pieces of research as well. In this section, I develop the idea of complexity further in order to draw attention to a hidden area in the animals debate. Once this is brought to light, it becomes obvious that present methods of regulating animal research are inadequate. It follows from what I argue that there is no place in which certain issues of fundamental importance can be debated. The only people with an influence on these matters are the animal-using scientists themselves. To a certain extent, then, scientific animal use is running free from social control and proper ethical scrutiny.

To identify the hidden area, let us put ourselves in the place of a researcher. Suppose I am committed to a worthwhile research program carried out to the highest standards. One day, I start to think about the large number of other programs which failed to get funding at the time my own one was funded. I follow this up by considering whether the proportion of the research dollar going to the sort of work I am engaged in is being well spent in comparison to how it might have been spent (say in epidemiological or public health research, or in preventive medicine programs). I have a nagging doubt that something is wrong: might it not be better if the money being spent on my research were going to some other program?

Notice where this chain of thought goes. It does not move immediately to the conclusion that there might be anything inherently wrong in what I am doing. In terms of the standards in my area, the research I undertake is of high merit, let us suppose. The ethics committee in my institution actually regards me as a model scientist, and I have pioneered some novel forms of environmental enrichment for the animals I work with. So there are no ethical problems about laboratory practice, the integrity of the research team, the standards of animal care, and so on. Notice that it was not from this point of view that my concerns arose. They involved

larger questions about how society is using its resources, and the direction that scientific research is taking. Suddenly, I reflect that this situation is no different from many others in which people find themselves. For instance, a police officer who would like to see certain drugs decriminalized may still work effectively and ethically as a member of a drug team enforcing the very laws that she would prefer to see changed. This looks like a similar case. The officer does everything right, even when there is a question hanging over whether the laws the officer is enforcing are themselves right. The very same behaviour which is right, from one perspective, is also seen as wrong from a different one.

The thought experiment has illuminated an important possibility. It may not be right that certain research is taking place, even when the researcher carrying it out is doing everything right! Any air of paradox about this evaporates once we see that actions are complex and can be viewed from more than one perspective. The second kind of rightness is concerned with the behaviour of the researcher, and the quality of the research. This is the sort of rightness which is monitored and policed in Australia by the animal ethics committees within institutions. These committees have to include members of animal protection and advocacy groups (as required by the national *Code of Practice*). As a consequence, approval of research projects and housing standards is subject to particularly tough scrutiny by people who may be in principle opposed to all research on live animals. However, these people have no input to deciding on the first kind of rightness. More accurately, they do not have input to this through their membership of institutional ethics committees.

How can we start to think about the ethics of animal use away from the institutional perspective? Any of a hundred examples would do, and I consider, for vividness, just one. For some parts of diabetes research, a widely-used animal model is the streptozotocin rat. Rats injected with streptozotocin suffer damage to the pancreas which induces diabetes. At different research centres, these damaged animals are studied for the light they can shed on glycogen synthesis or other biochemical phenomena which may advance the understanding and management of diabetes in humans.

At the institutional level, ethics committees have to be aware of the special problems associated with streptozotocin (it is an unstable and dangerous substance), the special care needs of the affected animals and the need for research involving such high impositions on the animals to be of the best quality as judged by international standards. It is at this level of concern that the input from animal advocacy groups is mandated in Australia and some other countries. Where there is doubt about a specific research proposal, committees may rely on external referees to assure them of the competence of the investigator and the significance of the work. What is important to recognize, however, is that these institutional-level concerns do not give a complete answer to the question: 'Is it right to undertake this piece of research?'

Here are some questions which cannot be adequately addressed as long as the focus is on the institutional setting:

(1) *How successful has this general line of research been in illuminating mechanisms, or stimulating new approaches to treatment and management of human diabetes?*

This question is, at best, only partially addressed at institutional level, and has by and large to be left to the judgment of the scientific community and funding bodies. The peer-review mechanism of national grant-awarding bodies does not normally provide for lay input or for any form of independent ethical scrutiny.

(2) *To what extent are animal-based studies proving currently productive for the general understanding of the relevant human biochemistry?*

This can be answered, if at all, only by considering the field of biochemistry as a whole at a given time. National strategy committees, or review sessions at international conferences, would be appropriate places for an explicit discussion of this topic. These normally have no animal protectionist input, or independent ethical scrutiny. If national or international review impinges on discussion at institutional level it will only be via the expert judgment of researchers and referees. At institutional levels, it has to be taken on trust that programs which qualify for competitive funding will be productive given the current directions in biochemical research. In summary, it seems that only

scientists themselves will ever give consideration to, and attempt answers for, this question.

(3) *What is the appropriate weight to be given to research on diabetes (including the rat model) compared with research on other human health problems?*

This third query is of the same kind that was put by the investigator in our thought experiment given above. It is only one of indefinitely many comparative questions which raise matters that can only be understood in relation to national and international trends, funding practices, and social analysis. Unlike the second question, this one cannot easily be fitted in to discussion at specialist scientific conferences. Like the second one, if addressed at all, it is likely to be considered by expert groups without the input of lay persons and animal protection advocates.

Conclusion: Arenas of conflict

The previous section raises questions of context and complexity that are seldom addressed explicitly in the literature on animal research. Philosophers, obsessed with principles and ethical theories, often gloss over the details of how moral decisions are reached. It is much easier to say that a practice is wrong than to suggest ways in which it can be made better. At the most general theoretical levels, there is a tendency to think in terms of exclusive positions: complete abolitionism at one side, and freedom for science on the other. Debates between such extremes are generally sterile, however inspirational their ideals. Institutions, caught in the middle, have set up committees and adopted national standards in an attempt to find a way forward that respects some of the demands of science on the one hand and the case for animals on the other. What I have argued above is that this is not enough. The ethical scrutiny of scientific animal use inevitably raises questions that cannot be settled within the institutional context.

In his address to the 10th annual Summit for the Animals on April 7, 1995, in St. Louis, United States, Merritt Clifton (editor of *Animal People*) urged the animal protection groups to become a ‘loyal opposition’ to science. In a parliamentary democracy the loyal opposition strenuously opposes the government of the day while sharing with it

respect for national laws, principles of democracy and due process. Australia is fortunate that it already has a loyal opposition, many of whose members sit on animal ethics committees. For them, however, the experience can be frustrating. Several of the high-level considerations that may have informed their resistance to animal research can find no expression at the institutional committee. When a proposal for research into a disease which affects only a small proportion of the population is put forward, there is no space for saying that the money would be better spent on tackling the health problems of Aboriginal communities. This is not an issue for a scientific establishment, like a university, to decide. Indeed, the funds for which the researcher is applying may well not be available for any other purpose. It follows that only some of the rights and wrongs of various pieces of research can be debated at the institutional level.

The establishment of animal ethics committees may give the misleading impression that the only arena of conflict over animals in research is the institutional one. It is not, and there is no reason for excluding the loyal opposition, and the rest of society, from playing its part in the ethical evaluation of science at levels beyond the university and the research laboratory. Most scientists recognize that science is not something above the law, and that they have no special authority when it comes to assessing the ethical implications of their work. It is surprising, then, that so little attention has been given to establishing national committees of ethical review, with a broad mandate and a wide membership. Such committees would become part of larger structures of scrutiny which would provide some assurance that science and technology is not running out of control.

For the purposes of this brief article, I have ignored the standard political processes in which animal protection organisations, the media and scientific pressure groups already play a part in dealing with contested issues. The possibilities for political activity, however, are not limited to elections, demonstrations, journalism and lobbying. Given that controversy can arise at many levels, the decision to include members of the ‘loyal opposition’ in decision-taking at institutional level in no way precludes them from having an important role to play at other levels.

Being aware that such levels of concern exist is also an incentive for establishing structures which can permit societies to explore more of the complexity of the problems which worry us.

Notes

1. John Rawls, *A Theory of Justice* (Oxford University Press, Oxford, 1972).
2. T. Buning, F.R. Heeger and H. Verhoog, 'Ethical aspects of animal experimentation' in L.F.M. van Zutphen, V. Baumans and A.C. Beynen, *Principles of Laboratory Animal Science* (Elsevier, Amsterdam, 1993).
3. Tom Regan and Peter Singer (eds.), *Animal Rights and Human Obligations*, second edition, (Prentice Hall, New Jersey, 1989).
4. See the *Australian code of practice for the care and use of animals for scientific purposes* (Australian Government Publishing Service, Canberra, 1990).
5. Andrew Brennan, 'Ethics, Welfare and Money' in N. Johnston ed. *Proceedngs of the Animals in Science Conference* (Monash University, Melbourne, 1995)
6. C.S. Nicoll and S.M. Russell, 'Analysis of Animal Rights Literature Reveals the underlying Motives of the movement', *Endocrinology* , 127, (1990), pp. 985-0.
7. While checking Nicoll and Russell's figures, I found that the USDA maintains an internet information service which includes up to date figures on all categories of animal slaughter. The URL for this service is http://www.usda.gov/nass/.

Biography

Andrew Brennan moved to the Chair in Philosophy at the University of Western Australia in 1992, having previously been Reader in Philosophy at the University of Stirling, Scotland. He works mainly on philosophy of mind, philosophy of education and environmental ethics. His collection, *The Ethics of the Environment*, was published in 1995 by Dartmouth Books. Since 1993 he has chaired the Animal Experimentation Ethics Committee at the University of Western Australia. In the last few years, he has published several articles on ethical and policy issues associated with the role of animals in scientific research.

TWO DIFFERENT APPROACHES TO GENE TECHNOLOGY IN ANIMALS

Birgitta Forsman

Gene technology on animals has increased enormously in Sweden during the 1990s. Most of it has to do with transgenic laboratory animals. Before this increase began, there was an official investigation of potential ethical problems of animal biotechnology, in which it was said: ‘We have the possibility to set the limits "from the beginning".’ And it also tried to do it.

This investigation was set up in 1989, when the Swedish government appointed a Principal Administrative Officer of the Ministry of Agriculture to make a so-called one-man investigation about gene technology used on animals and plants. A white paper from this investigation was published in February 1990 with the title Genteknik – växter och djur (Gene technology–plants and animals).[1] In the following, this white paper is called ‘the first report’.

However, in March 1990, the same government decided to set up a new investigation, which was called ‘The Commission on Gene Technology’. This was a big, so-called parliamentary commission with several politicians and experts in it and led by a retired Vice-Chancellor of a prestigious university in Sweden. This commission publicized its white paper in September 1992 with the title Genteknik – en utmaning (Gene technology–a challenge).[2] In the following, this white paper is called ‘the second report’.

The first investigation was commissioned by the Minister of Agriculture and the second by the Minister of Justice. It is unclear whether there had been any contact between the ministers about the issue. The existence of the first report is briefly mentioned in the second, but there are no real comments on it.

The Commission had a wider objective than the one-man investigation. However, the Commission decided in an early stage not to deal with gene technology on human beings, with the motivation that this subject had

already been treated by an earlier investigation that had published a white paper in 1984. The fact that a white paper on gene technology on animals and plants had been published much later, namely 'the first report', did not prevent the Commission from dealing with the report. Whether this is a deliberate shift of policy from the government is unclear. One could easily interpret the creating of the Commission as a rejection of the first report, but knowing about the long procedures before a Commission is set up I would hardly thing that this is a probable explanation. Rather, the cause seems to have been ignorance about the investigation that was already done. Also, the Principal Administrative Officer who made the first investigation was appointed as one of the experts on the Commission.

The first report stated several restriction, while the second report was rather liberal towards the use of gene technology. Some examples of considerations and suggestions in the first report are these:

– Gene technology used on animals is discussed mainly from an ethical point of view. In contrast, gene technology used on plants and micro organisms is discussed from the perspective of potential risks. The reason for this distinction of perspectives is that animals have moral standing, while plants and micro organisms with these things. have not.

– Generally, it is said that a Swedish prohibition or moratorium for research in gene technology would be both unwise and unrealistic. It would affect Sweden very negatively.

– Animal experiments are examined by ethics committees in Sweden. The first report points out that the considerations of these committees are limited to aspects concerning the treatment of the animals and the question whether the experiment has to be performed on animals. The ethics committees do not pay any attention to possible consequences of the research, for example if the gene technology research will result in products that are not desirable for ethical reasons. The first report says that research with gene technology on animals should be reported and examined from an 'extended ethical point of view'. This should be done

by a suggested Gene Technology Advisory Board. According to the report:

– Research with gene technology on food-producing animals with the goal of increasing the growth or production shall always be disapproved.

– Research with gene technology on food-producing animals or pets shall always be disapproved if a gene from a different species, including human beings, is brought into the animal.

– When animals modified with gene technology are ready to be let out in the environment or in production, the advisory ethical decisions will be insufficient. The existing animal ethics committees decide to approve or disapprove single applications (or protocols) concerning experiments on animals. However, this decision is only an *advice* to the scientist. He doesn't have to follow the decision. He can perform an experiment even if the application has been disapproved What is needed however is a binding regulation.

The considerations of the second report are more vague and metaphysical. Two questions occur time and again:

(1) Does nature have an intrinsic value and, if so, in what sense?
(2) Do humans have the right to alter nature and, if so, is there a limit to this right?

The second report presents a value basis with the following ingredients:

– The existence of an intrinsic value in nature.

– The Reverence for life principle (taken from Albert Schweitzer, of course).

– The doctrine of environmental protection, which means that one should 'prevent serious and irreversible disturbances in the fundamental functions of natural ecosystems'.

– A Kantian view on nonhuman nature, including animals.

– Animal well-being shall be the main basis for the assessment of gene technology used on animals.

Some more practical suggestions in the second report were the following:

– It shall be permitted that plants, animals and micro organisms be altered for ‘important purposes’.

– It shall be permitted that patents on living matter, including animals, be granted.

– It shall be permitted that all kinds of transgenic animals be constructed.

– It shall be permitted that chimeric animals be constructed for research purposes.

– No general prohibitions should be included in the law.

Clearly, there is an inconsistency both between the value basis and the practical suggestions and internally in the value basis itself. The first report draws a line between animals on one side and nature in general on the other. In this report, animals are regarded as individuals. In contrast, the second report is more ‘holistic’ and regards nature as a whole. The second report does not make any distinction between animals and other natural objects as potential possessors of moral standing. This confusion entails that the suggestions of this report are either vague or inconsistent with some items in the chosen value basis. There are also details in some statements of the experts in the Commission that simply clash with suggestions in the first report. One example is when the theological expert of the Commission says that he can see no ethical problems in connection with transferring human genes into animals used for food.

One can ask how it can be that two official investigations, set up by the same Swedish government, within the period of a couple of years could reach such deviating conclusions. And one can ask why this fact has not

been regarded and discussed. Why was the first report suddenly forgotten, as soon as the Commission had been set up? Why did the different ministers of the government and their staff not communicate with each other – there are no signs of such a communication?

I have no definite answers to these questions, but there are some possible explanations: The commitment of the persons involved varied and was also different in direction. The Minister of Agriculture was the one who had forced through the bill of the internationally well-known animal protection law in 1988. The Principal Administrative Officer, who made the first investigation, was a close staff member who had done much of the preparatory work for this law.The Ministry of Justice had no commitment to animal welfare. They probably regarded it necessary to set up a commission for harmonizing the Swedish law on gene technology with the European Union, in which Sweden some years later became a member state.

The first report is not hostile to science, but it draws some limits for the treatment of animals in the gene technology context. The second report gives power to the scientific community to form their own practices. The practical and legal consequences in the Swedish society have been more in accordance with the second report than with the first one. However, there were some parliamentary decisions made that from the beginning upset the scientific community. One of these decisions was the forming of a new agency for gene technology, which in fact only constituted a reorganization of an agency that had been existing since 1980. Also, the lamentations from scientists soon abated.

One cannot say that there is any difference in the treatment of animal ethics in Sweden as a consequence of the first or the second report. However, the quantity of experiments with animals modified by gene technology has increased considerably.[3]

Notes

1. Genteknik–växter och djur (Gene technology–plants and animals), Stockholm: Ministry of Agriculture, 1990. (Ds 1990:9)
2. Genteknik–en utmaning (Gene technology–a challenge), Stockholm: Ministry of Justice, 1992. (SOU 1992:82)
3. See also Forsman, B., & Welin, S., The Treatment of Ethics in a Swedish Government Commission on Gene Technology, Göteborg: Centre for Research Ethics, 1995.

Biography

Birgitta Forsman holds a research position with the Department of Medical Ethics at the University of Lund, Sweden. She has published extensively in the fields of animal ethics and medical ethics.

Patsy Hallen interviewing Julia Bell

Patsy Hallen: You have quite an extraordinary life because you live in the company of animals and I would just like you to describe where you live and who you live with.

Julia Bell: Thanks Patsy. I live in a little place called Ravensthorpe which is about two hours drive from Esperence and three hours from Albany in Western Australia. It is very, very dry and it is an old farming and mining community. There are about two hundred people in the town. It's very parochial, very sexist, very racist and very speciesist. I have lived there for three years with many companions: seven camels, five dogs, numerous joeys who unfortunately have died in various accidents, and a very spectacular carpet snake who lives in my bedroom with me. I have two old galahs who I rehabilitated many years ago. They have been with me for about fifteen years and I have numerous chickens, geese, turkeys, three very sweet pet pigs, a goat called Cindy who I milk and a ram called Minstrel because he is black and white and he still has his tail. My son, Byron who is 23 now, comes and goes.

Patsy Hallen: It would be interesting for readers to hear why you choose this companionship and what you learn from these animal people with whom you live?

Julia Bell: To answer that I will have to give some background of my life and how I have come to be in Ravensthorpe. I studied philosophy for many years completing an honours degree in moral philosophy with Freya Mathews at Murdoch University in Western Australia. Then I took off up to the Pilbura and spent some time with the Anunga Marda people in the Great Sandy Desert. I still had a hankering to get back to philosophy. I joined the bioethics program at Monash University working with Peter Singer and Justin Oakley. This greatly inspired me as I had read about Peter Singer for years and wanted to meet him and to spend time working with him. I completed my course work and came to Perth to complete my thesis as an external student. I returned to Perth and worked with my camels while continuing with my thesis. It was on vulnerability and what it means to be human. It concerned psychological

vulnerability as well as physical vulnerability. I was fortunate to have Justin Oakley as my supervisor who encouraged me in this area. When I came back I realized I couldn't really contemplate the vastness of what the thesis meant without putting myself in a physical position of doing it. So I thought that I would start a camel trek. I started walking from Spencer's Brook and ended up out on the Nullarbor Plain about five months later. I was walking through very cold weather to start with and rain and hail and then as the months wore on, I ended up in a very warm climate, too warm in fact, and I had to come back. I came back to Perth and felt claustrophobic and I related to a comment on the radio 'I'm laying on my bed about to turn 40 and I'm going mad'. I was about a week off turning 40. I suddenly realized what this meant, jumped up, found the house for sale in Ravensthorpe and approached my neighbour to buy my property. It literally happened overnight. He bought my property and I headed off to Ravensthorpe and got my camels back. My main reason was that I had to get back to space. I had to get back with my camels after spending five months with them. I guess it did change my life in very profound ways which I cannot even express at this stage.

I bought an old property in Ravensthorpe which was very dilapidated. In fact it was a rubbish tip. The thing that inspired me was that there was a small part of the property which was the only piece of land in Ravensthorpe that aboriginals had lived on for many years. They had left fifteen years ago. That is where I built my camel yards, in that very spot. The property is sixty three acres and for last three years I have tried to rebuild it making fences, planting trees and making the house decent. As you can imagine the rainfall here is very low, so to keep things is alive is difficult. I live there with my companions in a very small house. I have encouraged the local frog population by creating two ponds. I have a whole variety of different frogs there now. I have also encouraged the reptile population which includes tiger snakes. I am trying to work out a way for us to live comfortably together without having to kill every second tiger snake I see which has been very difficult.

That was the reason I had to get back to that gold fields country. But when I arrived there I realized it was probably a foolish thing as there was no university and I had separated myself from my close circle of

female friends who I lived with very closely in Perth. To get to university was a six hour drive. I felt very isolated. I felt very much a minority. I felt I was fighting for my self preservation and identity because of battles with shire officials, e.g. to get camel signs on my road, to stop them using herbicides around my property. It was incredibly tough but I managed to do it.

From there I started thinking how could I constructively create a philosophical life using my background and living with animals as I had chosen to live and working with the earth. I created a very viable vegetable garden which I basically live out of. I have tried killing my chickens for meat with no success. I really found it difficult wringing the chickens necks or chopping their heads off, so I stopped that. What I am trying to do now is to set up some ecological niche whereby I can live with the introduced animals which I have for educational purposes. I have children coming out from the schools and families bring their children. What I am trying to do in a very basic way is talk to the children, read them a narrative such as 'Charlotte's Web' and express to them very simply the ideas of intrinsic and instrumental value. I use that philosophical narrative in a simple way hopefully to show the children that there are other ways of looking at sheep and pigs than purely as a resource for either meat or whatever. That seems to have been quite successful.

The other thing which I am aiming at is to get a sanctuary going for the wildlife endemic to the area. I have had no success with all the avenues I've tapped into: conservation-wise, government departments and departments which are meant to be helping women in rural communities. I've just come up against a brick wall and the story that I've been told runs: you can set it all up, but there is no funding. So to keep the place sustained I've had to go back nursing part-time. The other thing I thought of doing is running philosophy groups for children, which I have done elsewhere. I have approached the local schools but the principals are not familiar with philosophy and they tell me that there is no funding even though I've offered my services on a voluntary basis. I hope this answers why I am here.

Patsy Hallen: So Julia, it was really camels that galvanized you back into a rural setting because you couldn't keep your camels where you were living in Perth. Can you tell us something about sharing your life with camels? What are camels like and what do you like about them?

Julia Bell: Camels are really quite remarkable creatures. They deserve a lot of respect. They are incredibly intelligent, very, very resourceful and very functional. When I was on my trek I used to think about Aristotelian ethics. Aristotle as well as the modern commentator Martha Nussbaum talk about what it means to be human, the primary thing is being functional and I think about the connection with this and how the camel of all animals is such a functional animal in so far as it is incredible in any situation. It adapts so amazingly to the heat and to the cold. It can recycle its urine. It is the only mammal with oval blood corpuscles. Other mammals have round ones and this is the reason that it doesn't hydrate like other mammals. So there are all these wonderful functions which it has. It can slow down its whole metabolism. It can go up to three weeks with no water and it can go up to two months with very little food. So the connection between philosophy and camels is very clear to me using an Aristotelian framework. Sometimes I find that difficult to explain, especially talking to other cameleers. Talking to other philosophers I feel quite comfortable. So for those reasons and I also think they are very sensual sorts of animals. I love stroking them and spending time with them. I've attended the three female camels (cows) births and I have been very close right through the deliveries. I've trained all my camels myself which has taken a lot because I've been kicked and had my eyes slashed, and been bitten and spat on. They are very big animals as you can imagine. I've never hit them with polypipe which is very common amongst cameleers. The majority of male cameleers laugh and say you have got to give the animal a good hiding. I always reflect when they talk about camels in this way about the close connection with the feminine: 'You have got to break her in. You have got to hobble her'. I'm always making these connections with my life with camels.

Patsy Hallen: Yes. So the distinction which you are using is that you refuse to break your camels in. You really want to encourage them to follow you. So you want to train them rather than to break them.

Julia Bell: Yes. I actually talk about working with my camels, with all of my animals, rather than breaking them in. You can never break a camel in.

Patsy Hallen: Julia, Camels are feral but they are much less harmful on the natural world because they don't have hard hoofs. Would that be right? Compare them say to horses. How are camels in relation to horses?

Julia Bell: Camels are very low maintenance compared to a horse. You don't have to shoe them. They have very soft pads so they don't take dieback into areas which are prone to dieback. Compared to a horse, a cow or a sheep, they don't just strip anything. They are top graziers. They are very selective with their eating. So even though they are feral they do belong to Australia. They are very well adapted to the Australian climate.

Patsy Hallen: So when they take a bush, they just basically prune it. They don't destroy the bush?

Julia Bell: Yes.

Patsy Hallen: It has been said that Australia has the largest population of wild camels left in the world and that they are very healthy as well.

Julia Bell: Yes. Australia is the only country left in the world with wild camels. Every other camel that you see is basically owned. The reason why Australian camels are in such high demand in the Middle East is that they are very low in diseases. They only thing that the camel has in Australia is mange or worms which are easily controlled. They are very healthy and very good stock.

Patsy Hallen: I've also heard you say that they are very resourceful in so far as they combine being a sheep, a cow and a horse. Do you want to explain that?

Julia Bell: What I mean by that is they have this amazing hair. It's not wool like a sheep. It has no lanolin and you can take the hair off in big sheets. You can skin it and make wonderful garments. You have

probably seen the '40's and '50's expensive camel hair coats. The other thing is that you don't have to shear them like you do a sheep. You don't have to do all the mulesing and all the horrible business which is really a necessity in the country with sheep. You get away from that. You can use their tail. Artists make paint brushes from their tails. It is very fine hair and you can make butter out of their humps. You can eat their lean meat which is very low in cholesterol and you can milk them. I was reading an article in the New Scientist recently said that the milk has properties in it which enhances the human immune system. Now their little pads are being exported to Asian countries for use as an aphrodisiac. That is just a side thing but overall what I mean by comparing them with a horse, a cow and a sheep is that they are far more functional. You can use the whole animal, more than any of those other animals, if you choose to but more than anything they make wonderful companions. They are very loyal, very faithful and once you make a friend with a camel, it is a bit like an elephant, they never forget.

Patsy Hallen: Yes. I guess that they are like a sheep in that you can use their fur or coat. They are like a horse in so far as they are a good pack animal.

Julia Bell: And you can also tan their leather, like a cow.

Patsy Hallen: Yes. And you can milk them like a cow but that is looking at them in a very utilitarian way. I suppose that we are talking about animals that have died naturally and the problem with something like using their pads as aphrodisiacs for an Asian market is that might then drive people to kill camels just for their pads rather than looking at illusions of human potency or rather than addressing the psychosexual problems of males. We take it out on animals and slaughter animals for that purpose in the hope that they will give us some kind of potency.

Would you Julia, being as close as you are to your camels, would you eat a camel?

Julia Bell: I have eaten camel meat but because I am a basically a vegetarian, I don't like any meat unless it is an absolute necessity. I have

shot a young goat when I was out on the Nullarbor and I have shot rabbits basically for survival and for survival, if I was in a desert, I would shoot a camel. I wouldn't eat one of mine unless I was starving. I would have to be sensible about it. I think that it is a matter of respect. It is like what Peter Singer is saying, 'If you can't kill it, you shouldn't eat it'. If you are going to kill an animal, if you use the whole animal that is better than just shooting them like a lot of station owners are doing in the desert at the moment. They claim that the camels are destroying the fences which is rubbish. There is no evidence to back that up but instead of just shooting them and leaving them to rot, they should be used constructively. That is what I am trying to get at, not that I would like to see that done but if the populations do grow as is happening then I think that they should be used constructively rather than just shot and left to rot. It is similar with the kangaroo population - you get the arguments that some have to be killed. If it has to be done then it should be done sensitively and in a constructive way.

Patsy Hallen: I always used to think that it was a waste to just shoot animals and let them rot until someone pointed out to me that the whole local natural environment might profit from them. Humans don't but all the worms, the grubs and the things that eat the carcass and the dingoes may profit.

Julia Bell: Yes. There are always so many ways of looking at it.

Patsy Hallen: I can remember once when I was back-packing and I was carrying little protein. There was a dolphin washed up on the beach which was clearly dead. I went over to look at it and give it my respect. I wondered whether I should eat it. In the end I couldn't bring myself to eat it even though it was dead. I guess it is a matter of respect. It was a bit degrading for the dolphin to have some part hacked out of it. I suppose eventually one of your camels will die of old age. Would you have the courage to eat it or would you just bury it?

Julia Bell: No. Only if I was starving. To me there is no difference in saying if my loved one, my child or a close friend dies I would bury out of respect. But I guess if I was in the middle of the Andes, as in the

stories of plane crashes, and my loved one died, then to eat a bit of that meat for my survival is almost sacred. However because I don't have to do that I wouldn't do it.

Patsy Hallen: We are participating in Earth Philosophies Australia Bush School and Julia is one of our honoured facilitators. This morning we met in a beautiful room called The Hexegon, an eight sided room built mostly of glass and recycled timber which sits under a canopy of very old kauri trees. It looks over a beautiful inlet called the Wilson Inlet which has got granite boulders which jut out into its basin and there are lots of spoon bills, pelicans, coots, ducks and swans. We were sitting there and Julia told us a very moving story about her lead female camel called Suzie and the death of Suzie's calf. Could you repeat that story for us Julia?

Julie Bell: Susie has had two calves now since she has been with me. She is probably now twenty years old. Camels live up to sixty years. Camels are likened with the elephant. I have heard scientists discuss elephants and camels along with whales which is quite inspiring. She is not really an old cow. This was her second delivery. I had a dream weeks before that I had given birth to three children and the first one died. So I thought that something would happen to Suzie's calf. I have a close vet friend, who is recognized as the camel vet of Western Australia. He lives about three hours drive from me but on this occasion, I didn't contact him.

I sat in the paddock with Suzie all day and I camped by her that night in my sleeping bag. It was a very foolish thing because camels are very protective of their newborn. There could have been a disaster. She could have jumped on me and crushed me with a hard bony prominence under a camel's chest. That is how they can crush you to death. I trusted her. I've got this amazing sense of trust and I think that there is a sense of reciprocity. I slept with her through the night and she was bleeding. The thing that moved me was that I was also menstruating so I thought of this strong connection with the whole cycle of life and the movement of things, the passage of things. I was bleeding. She was bleeding. She was giving birth and the moon was coming up. So it was a very special night

for me. She delivered and it was a breach birth. When I helped pull the calf out, she was struggling. I tried to give it mouth to mouth resuscitation to get it breathing which I did do with Suzie's first calf and I got that one breathing. I tried with this one but it didn't work. It was obviously dead. She just let me do it which amazed me. She let me fondle the calf. Then she turned around and sniffed it, nudged it with her nose and bellowed. It sounded like that harrowing whale sound. It went on for three days. I left her in the paddock with the calf and the placenta, let her smell it, let her realize the calf was dead and do her own grieving. For me, there was a strong connection between both of us. After three days I picked the calf up and wheeled it in a wheel barrow a fair way to a grave yard that I had organised with the hole already dug. She was with me when I put the calf into the hole and buried the calf.

Patsy Hallen: And to this day you say, although there is good tucker, the camels won't go near.

Julia Bell: I have probably half an acre which I have set aside. I call it a sacred cove where I bury all of my companions. I let the camels out to graze on the blue bush nearby, but they never go near the cove area. Susie bellowed for three days and for a year after that she wouldn't let me near her. She had a change of personality. I feel that she blamed me or thought that I had done something to the calf. It is just recently that we have re-connected. I have let her go very gently after the last two years. The interesting thing now is that I have a new camel, Betsy, who is pregnant and about to deliver any day. Sinbad the bull has given her a hard time so I have had to separate him as it is not his calf. Even though he is gelded he is still quite fiery. The strange thing is that Luke, a friend who is looking after the camels, says that Suzie has become like a midwife to Betsy. She follows her around. She is out in the paddock keeping Sinbad away. It is quite a remarkable relationship. She has taken on the midwife role of watching to make sure that none of the other camels come and harass her while she is delivering. So they are quite remarkable animals.

Patsy Hallen: Thank you Julia for being a midwife to our understanding of how better to live with animals. I think that you are not only a

philosopher in the traditional sense of the word insofar as you are a lover of wisdom but I also think you know about the wisdom of loving.

BOOK REVIEWS

Garber, Marjorie. *Dog Love*. 341 pp. (New York: Simon & Schuster, 1996)

What does it mean to love a dog?

Marjorie Garber, Director of the Center for Literary and Cultural Studies at Harvard, and best known for her cultural studies of bisexuality and cross-dressing, has mobilised her analytical talents and undertaken an enormous and illuminating project: a literary and popular investigation of our relationship to and love for dogs.

Dog Love is an overview of our historical, literary and cultural preoccupation with dogs: from the history of breeding, to criminal and rescue dogs; psychoanalysis and dogs (including Freud's dogs) to the new, popular literary anthropomorphism; Dylan Thomas' *The Portrait of the Dog as a Young Artist* to television's Lassie; writers' dogs to academics' dogs (and their dogs' names); talking dogs to bestiality; petimony (and pooper scoopers) to DNA cloning; a dog's grief to dog loss. Yet despite its scope (or perhaps because of it), Garber manages to open up many important philosophical and ethical issues, suggesting a range of areas for further theoretical analysis.

Having owned my very first dog (Hilda Doolittle, a kelpie named after the poet) for two years now, this book celebrated my new-found dog love, while posing questions I had only recently asked myself: What does it mean that I fantasise about speaking with my dog? (or more truthfully, fantasise about becoming-dog?) Is a dog an agent in itself or merely an extension of its human owner in relation to the law? Who is responsible for the damage a dog may do? What does the increasing jurisdiction around dogs and the corresponding fight for dog-rights reflect? Do puppies have mirror-phases, as Lacan suggests human children do? (I am sure I caught my dog 'stuck' in the mirror once.) Can a dog contemplate; can she be a philosopher? (One morning when I refused to get up, I let Hilda outside to wait for me. From my bedroom window I watched her sitting exceptionally still in the middle of the garden, her nose up, just

smelling the air - I imagined - and watching/ listening to the birds. She remained that way for a good twenty minutes.) Why is it easier sometimes to love my dog than my lover? Do dogs have souls?

While always contemplative, *Dog Love* is also a collection of real-life and fictional-life (dog biography and autobiography) accounts of dog-human relationships, and the emotional, psychological, sometimes sexual and often financial investments we make in them.

It is unbelievable as the dog who arrived to meet his owner at the subway station every day for nine years after his owner had died, waiting at the station until midnight, only to return the next day;

funny as Shady Spring Kennels in Maryland which offers: '...dog-paddling, Frisbee and hiking, a Bark-and-Ride camp bus, a camp spa with hairdo and pedicure, and bunk photographs for the proud parents to take home'; dog superstores and dog psychiatrists;

disturbing and politically relevant as the tale of the pit-bull from notoriously racist Virginia who was in need of rescue from legal 'execution' for being a dangerous dog; and his black owner who believed he could save him by explaining to the court that: 'All the ladies in the neighborhood like him. Not just the colored ladies. The white ladies too';

and wise as Virginia Woolf's account of a Robert Browning's dog Flush after a haircut: 'What am I now? he thought, gazing into the glass. And the glass replied with the brutal sincerity of glasses, "You are nothing." He was nobody. Certainly he was no longer a cocker spaniel. But as he gazed, his ears bald now, and uncurled, seemed to twitch. It was as if the potent spirits of truth and laughter were whispering in them. To be nothing-is that not, after all, the most satisfactory state in the whole world?'

Touching, smart, extensive and difficult to put down, this book should be read by anybody who loves a dog and certainly by those interested in the ethical and philosophical nature of dog-human relationships.

Emily Ballou

DeGrazia, David, *Taking Animals Seriously: Mental Life and Moral Status*, x + 302pp. Cambridge University Press, Cambridge, 1996.

Is DeGrazia a sophisticated Singer? This thought arose early in reading this book and hovered until the end. There is an attempt to build up a different philosophy of moral respect for animals but when the practical implications are detailed, it seems that utilitarian currents remain. For example, in discussing the issue of the justification of zoos for their entertainment value, DeGrazia says 'Entertainment is simply not a serious enough benefit to justify such harms [i.e. the harms of confinement, etc.]'.

This may be a very unfair reading of the book which has many marvellous features. In defending a coherence model of ethical justification, DeGrazia puts forward a series of norms which the model must conform to: argumentative support, global illumination (a coherent system must hang together and the system must explain how the parts hang together), simplicity, clarity, plausibility, compatibility (or coherence) with whatever else we know or reasonably believe. This is an interesting list reminiscent of Kuhn's attempt to ground a position on the justification of scientific theories See T.S. Kuhn, 'Objectivity, Value Judgment and Theory Choice' in *The Essential Tension* (University of Chicago Press, Chicago, 1977). DeGrazia goes on to state that fallibilistic and contextual judgements about these norms constitute a type of objectivity. This, I think, stretches the meaning of objectivity too much but one could allow for a high level of consensus on such norms while denying there is any objectivity here. In support of his coherence theory, DeGrazia says that 'an incoherent opinion, position, or theory is not reasonable; it does not make sense' (page 18). This is a problematic claim. There is equivocation on 'incoherent'. If he means by 'incoherent', a position which violates his theoretical norms such a position could still make sense. If he means 'nonsense' by the term 'incoherent' then of course an incoherent position does not make sense but this is not the same as saying that the position violates his theoretical norms.

In addition, DeGrazia defends 'a modified notion of impartiality or universalizability recognizing feminist and other criticisms of this notion'. He doesn't handle these criticisms entirely satisfactorily. In response to writers such as Gilligan who suggest that care may be a higher value than impartiality at least for some people, DeGrazia says that he isn't arguing that the care perspective is invalid just that it is insufficient. There is still a conflict with Gilligan. Her arguments have not been met. Also in the statement of the universalizability principle which DeGrazia accepts it is not clear how these criticisms have been recognized: '*Universalizability and formal justice imply that we should grant equal moral weight or importance to everyone's (relevantly similar) interests,unless there is a relevant difference between the beings in question* '. Perhaps if more work is done on the notion of 'relevant difference' a possible resolution of this debate might emerge.

DeGrazia makes a further move in Chapter 3 arguing that the theoretical virtues of the coherence model favour equal consideration of animals. There is careful exploration of what this might mean. Chapters 4 to 6 deal with the mental life of animals as DeGrazia believes this study is necessary to determine which animals have 'basic moral status' and whether there are morally significant differences among beings with moral status. In these chapters he draws on human phenomenology, research in animal behaviour, functional-evolutionary arguments and physiological evidence. Human phenomenology is discussed as DeGrazia believes that we have good reason to think that many animals have minds whose contents are not wholly dissimilar to the contents of human minds. He states that human phenomenology sets the agenda for what kinds of mental states to look for in animals, a human-centred approach with obvious plausibility. Nevertheless I think that we should be open to the possibility that there are animal mental states which are *different* from human ones which could be a basis for according moral status.

The appropriateness of using the other three types of evidence is given a strong defence. For DeGrazia, taking animals seriously requires taking their minds seriously. So it is necessary to consider the empirical data on animal minds. An excellent summary of this data follows. It points to the

following conclusions amongst others: that we can attribute pain and consciousness generally to most or all vertebrates and probably at least some invertebrates, e.g. cephalopods; (consciousness is accepted as a sufficient but not necessary condition for mentation and it is distinguished from self-consciousness) and we can attribute anxiety, fear, suffering and pleasure to most or all vertebrates and possibly a few invertebrates. Most or all vertebrates can think. Some animals have a sense of time and grizzly bears, Great apes, lesser apes, elephants and dolphins have self-awareness. After a careful exploration of what it is that constitutes language, DeGrazia concludes that dolphins and sea lions can master certain syntactic and semantic rules. Chimpanzees, bonobos and gorillas have a range of linguistic capacities. He then draws the general conclusion that 'some apes and cetaceans have used, and many of their conspecifics can do doubt learn, certain forms of language'.

DeGrazia provides a short but convincing argument for the claim that at least some animals are moral agents, a quite novel position but one that is receiving some empirical support.

The principle of equal consideration defended requires that equal moral weight be given to relevantly similar interests. After surveying standard forms of value theory for humans, DeGrazia supports a subjectivist position. He argues that all and only sentient beings have interests (based on his coherence theory). There is an extended discussion of the possible harm of death to animals, an issue which is generally not given enough attention. Although his conclusion is tentative he agrees that 'normal humans who are not thoroughly miserable and hopeless lose more from dying than do many animals with moral status (at least from fish through birds).'

The principle of equal consideration requires that equal moral weight or importance be given to relevantly similar interests no matter who has them. Some implications of this principle are: a prima facie duty not to do harm to sentient beings; and a duty not to kill, disable or confine sentient animals unnecessarily. Some further practical consequences include a condemnation of factory farming, fishing, and the practices in most zoos as ethically indefensible.

I would like to see more argument on the point that it is only sentient beings who have interests and deserve moral consideration. It is easy to say along with DeGrazia that nonsentient animals, species or ecosystems don't have 'relevantly similar interests' but why then do I feel a *moral* repugnance at the devastation currently being visited upon coral reefs or native forests around the world? Is this simply misplaced?

There are some curious omissions in this book. Ted Benton's *Natural Relations* is not mentioned. Nor is the work of Greta Gaard, Lori Gruen or Linda Birke. There is almost no discussion of animal experimentation which is very odd given the strong defence of vegetarianism. However *Taking Animal Seriously* does contain a wealth of well-worked out discussion on an impressively wide range of issues in animal ethics. It would make an excellent text for a course in this area.

Denise Russell

BOOK NOTES

Linzey, Andrew, *Animal Theology*, vii +214pp., Illinois Press, 1995.

Many of the chapters in this book have been in the public domain for a few years as conference papers, journal articles or lectures but they still constitute a fresh Christian perspective on animals, confronting the view often read into Christianity that animals are in the world for human use. The first part of the book is about establishing Christian principles which relate to animals. These principles turn out to imply some direct moral duties. The second half of *Animal Theology* contains an elaboration of these principles. Vegetarianism is defended. Animal experimentation, hunting and genetic engineering are all condemned with arguments which work well given Linzey's basic assumptions but they don't engage with the challenges of different views a great deal.

Beck, Alan and Katcher, Aaron, *Between Pets and People: The Importance of Animal Companionship*, revised edition, xiii + 316pp., Purdu University Press, Indiana, 1996.

Between Pets and People is a report of the research which Beck and Katcher conducted on human-pet interactions. They used techniques developed by ethologists to study animals in the wild to observe people and pets in parks, homes and clinic waiting rooms. They also used physiological measurement, e.g. of blood pressure and some epidemiology of health and disease. The main research was done prior to 1983 when the first edition came out. There have been some new additions. The book is not very technical. In fact the style is conversational. Some accounts are fascinating but many readers will wish for more depth.

Bavidge, Michael and Ground, Ian, *Can we understand animal minds?* vii + 176pp., Bristol Classical Press, London, 1994.

'Mind' here is taken to refer to 'that range of capacities, states and processes which constitute the living experience of a creature' or the animal's point of view on the world. No mental entity is posited. Debates

in the animal sciences concerning the subjective experiences of animals are outlined followed by a quick run-through of various philosophical theories of mind. There is an attempt to defuse the problem of anthropomorphism and to tackle the problem of how it is that we can ascribe psychological concepts to non-language using animals. The concept of *expression* is employed. *Can we understand animal minds* is a good, fast read. This is also not a 'deep' book but it does present some fresh insights and neatly cuts off many dead ends in philosophy of mind.

Groves, Julian McAllister, *Hearts and Minds: The controversy over laboratory animals* viii + 230pp., Temple University Press, Philadelphia, 1997.

Groves is not offering a new moral theory from which we can draw conclusions concerning ethics and animal experimentation. His aim is to describe how certain people feel about such research and their reflections on these feelings. The people in the study are from a 'mid-size college town' in the United States. They are animal rights activists and animal research supporters. It is probably fair to say the sample is representative of activists and research supporters in other Western countries. *Hearts and Minds* does highlight the complexity of attitudes and feelings on both sides of this divide. Yet Groves thinks that the two groups are not as different as they have been made out to be with regards to their feelings about animals.

The final chapter contains a discussion of the problems with federal and institutional guidelines for laboratory animal welfare. This is certainly an area which needs much more consideration along with the broader questions concerning regulation of animal research and promotion of alternatives. The existence of institutional guidelines and ethics committees often leads to unwarranted complacency. .

Announcements

The Encyclopedia of Animal Rights and Animal Welfare will be published by Greenwood Press and it is tentatively scheduled for release in early 1998. Edited by Marc Bekoff of the University of Colorado this one volume reference work will provide essays from recognized authorities in the field addressing the many issues of animal rights and animal welfare. The forward is written by Jane Goodall. For more information contact Marc Bekoff, EPO Biology, University of Colorado, Boulder, Colorado, 80309-0334, U.S.A. email: marc.bekoff@colorado.edu

ISBN 1 86451 299 7